



INITIAL STUDY AND NOTICE OF PREPARATION

FOR THE

2040 PLACER COUNTY REGIONAL TRANSPORTATION PLAN

JUNE 6, 2019

Prepared for:

Placer County Transportation Planning Agency
299 Nevada St.
Auburn, CA 95603
(530) 823-4032

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills CA 95762
(916) 580-9818

D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



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Prepared for:

Placer County Transportation Planning Agency
299 Nevada St.
Auburn, CA 95603
(530) 823-4030

Prepared by:

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1020 Suncast Lane, Suite 106
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(916) 580-9818

NOTICE OF PREPARATION

TO:	FROM:	EIR Consultant:
State Clearinghouse	Placer County Transportation Planning	Steve McMurtry, Principal Planner
State Responsible Agencies	Agency	De Novo Planning Group
State Trustee Agencies	Aaron Hoyt, Associate Planner	1020 Suncastr Lane, Suite 106
Other Public Agencies	299 Nevada St.	El Dorado Hills, Ca 95762
Interested Organizations	Auburn, CA 95603	
	(530) 823-4032	

SUBJECT: Notice of Preparation – 2040 Placer County Regional Transportation Plan

Placer County Transportation Planning Agency (PCTPA) is in the process of updating the Placer County Regional Transportation Plan (RTP) and has determined that the update is subject to the California Environmental Quality Act (CEQA). CEQA requires the preparation of an environmental impact report (EIR) prior to approving any project that may have a significant impact on the environment. The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. The PCTPA intends to prepare a Program EIR pursuant to CEQA Guidelines Section 15168. The programmatic analysis considers the broad environmental effects of the RTP as a whole. The programmatic approach is appropriate for the proposed project because it allows comprehensive consideration of the reasonably anticipated scope of the RTP; however, not all aspects of the future improvement projects are known at this stage in the planning process to enable more detailed analysis. Individual improvement projects that require further discretionary approvals when their project details become available will be examined in light of this EIR to determine whether additional environmental documentation must be prepared.

An Initial Study has been prepared for the project and is attached to this Notice of Preparation (NOP), and can be found at the PCTPA website at: <http://pctpa.net/rtp2040/>. The Initial Study lists those issues that will require detailed analysis that will need to be prepared as part of the EIR. In addition, the EIR may also consider those environmental issues which are raised by responsible agencies, trustee agencies, and members of the public or related agencies during the NOP process.

We need to know the views of your agency or organization as to the scope and content of the environmental information germane to your agency's statutory responsibilities or of interest to your organization in connection with the proposed project. Specifically, we are requesting the following:

1. If you are a public agency, state if your agency will be a responsible or trustee agency for the project and list the permits or approvals from your agency that will be required for the project and its future actions;

2. Identify significant environmental effects and mitigation measures that you believe need to be explored in the EIR with supporting discussion of why you believe these effects may be significant;
3. Describe special studies and other information that you believe are necessary for the PCTPA to analyze the significant environmental effects, alternatives, and mitigation measures you have identified;
4. For public agencies that provide infrastructure and public services, identify any facilities that must be provided (both on- and off-site) to provide services to the proposed project;
5. Indicate whether a member(s) from your agency would like to attend a scoping workshop/meeting for public agencies to discuss the scope and content of the EIR's environmental information;
6. Provide the name, title, and telephone number of the contact person from your agency or organization that we can contact regarding your comments;

Due to the time limits mandated by State law, your response must be sent and received by the PCTPA by the following deadlines:

- For responsible agencies, not later than 30 days after receive this notice,
- For all other agencies and organizations, not later than 30 days following the publication of this Notice of Preparation. The 30-day review period ends on July 6, 2019.

If we do not receive a response from your agency or organization, we will presume that your agency or organization has no response to make. A responsible agency, trustee agency, or other public agency may request a meeting with the PCTPA or its representatives in accordance with Section 15082(c) of the CEQA Guidelines. One public scoping meeting will be held during the public review period at the PCTPA Office on June 26, 2019 at 6:00 pm.

Please send your response to Placer County Transportation Planning Agency, 299 Nevada Street, Auburn, CA 95603. If you have any questions, please contact Aaron Hoyt, Senior Planner (530) 823-4032.

Signature

Date

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INITIAL STUDY CHECKLIST

PROJECT TITLE

2040 Placer County Regional Transportation Plan

LEAD AGENCY NAME AND ADDRESS

Placer County Transportation Planning Agency
299 Nevada St.
Auburn, CA 95603
(530) 823-4032

CONTACT PERSON AND PHONE NUMBER

Aaron Hoyt, Senior Planner
Placer County Transportation Planning Agency
(530) 823-4032

PROJECT SPONSOR'S NAME AND ADDRESS

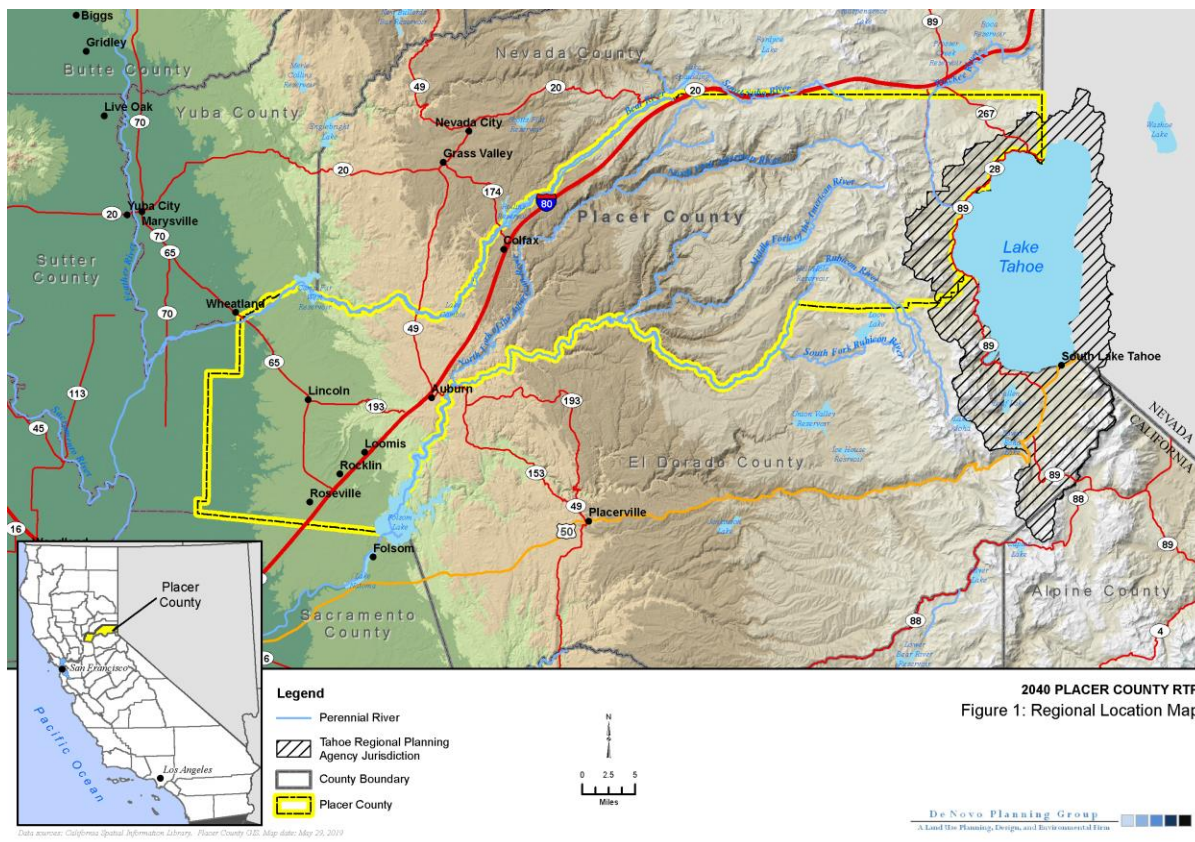
Placer County Transportation Planning Agency
299 Nevada St.
Auburn, CA 95603
(530) 823-4032

PROJECT LOCATION AND SETTING

Placer County lies adjacent to Sacramento County, and extends east from the Sacramento region to the Sierra Nevada range. Placer County is part of California's historic Gold Country region, which was first settled by non-Native Americans during the early 1850's Gold Rush era. Many of the Region's roadways were laid out by these early miners and settlers. At approximately 1,502 square miles in size, Placer County is a medium size county in California, and contains a wide geographic range. Figure 1 shows the project regional location.

The county's elevation ranges from a low of 160 feet in the county's flatlands to a high of nearly 9,500 feet in mountainous peaks of the Sierra Nevada near its eastern boundary. Geographically, the county can be divided into three physiographic divisions. The lowest elevation area in the western portion of the county is primarily developed suburban residential area, within and adjacent to the cities of Roseville, Rocklin, and Lincoln. This area contains most of the county's population, and is situated in the Sacramento region. Large portions of this low elevation area are also used for agricultural cultivation. Moving eastward, the second division includes the foothills region of the county, which are typified by rolling hills with extensive rangelands and oak woodlands. The Town of Loomis and City of Auburn are located in the foothill region. The third division, which includes the highest elevation areas in the eastern portion of the county, is largely typified by a forested landscape that is bisected with steep canyons and sweeping ridge tops. This region, within the Sierra Nevada, includes the City of Colfax and several small, unincorporated communities, such as Weimar, Gold Run, Alta, Emigrant Gap, and Soda Springs, as well as large tracks of rural-residential housing that are dispersed throughout the area. Areas in the Sierra Nevada outside of rural-residential ownership are predominately comprised of

public and private forest lands that are typically managed for timber production or for watershed and recreational values.



GENERAL PLAN AND ZONING DESIGNATIONS

The 2040 Placer County Regional Transportation Plan (RTP) is a regional planning effort developed by the Placer County Transportation Planning Agency (PCTPA) that covers all of Placer County, except for Placer County area within the Lake Tahoe Basin. The Lake Tahoe Basin area is served by the Tahoe Regional Planning Agency (TRPA), as shown in Figure 1. Therefore, the General Plan land use and zoning designations for the areas affected by the 2040 Placer County RTP are inclusive of the PCTPA Planning Area — meaning that the land that would be affected by implementation of the RTP will include any and all General Plan land use and zoning designations that are established by the local land use authorities that are within the PCTPA Planning Area (planning area).

PURPOSE AND NEED

State law requires that the RTP be updated and submitted to the California Transportation Commission (CTC) every five years. The purpose of the RTP is to identify the Region’s short-term and long-range transportation needs and to establish policies, programs, and projects designed to meet those needs. Transportation improvement projects that are included in the RTP and are prioritized for funding through the Regional Transportation Improvement Program (RTIP) are then submitted to the CTC for programming every two years as part of the State Transportation Improvement Program (STIP). Projects that are proposed for funding through other sources, such as state or federal competitive grant programs are submitted according to the requirements

of individual programs. In either case, improvement projects proposed for funding must typically be identified through either a local or regional transportation planning process, such as the RTP.

The RTP needs to be updated in order to demonstrate the progress made toward implementing the currently adopted RTP (2036 RTP), to reflect any changing conditions, and to determine if changes are warranted to the PCTPA's policies, programs, and projects for the next 20 years. Lastly, the 2036 RTP needs to be updated to maintain compliance with the CTC's 2017 Regional Transportation Plan Guidelines.

The 2040 RTP Update is consistent with all relevant state and federal transportation planning requirements. Consistency with these requirements is summarized in Caltrans' Regional Transportation Plan Checklist, which is included in an Appendix to the RTP. The RTP is integrated into the broader regional planning context of the Sacramento Area Council of Governments' (SACOG) Metropolitan Transportation Plan (MTP). SACOG is the state designated RTPA for Sacramento, Sutter, Yolo, and Yuba counties and is also the federally designated Metropolitan Planning Organization (MPO) for the six-county region including Placer and El Dorado. As an RTPA and MPO, SACOG updates the MTP every four years to satisfy their federal planning responsibilities for the six-county region and state requirement to develop a Sustainable Communities Strategy (SCS) pursuant to Senate Bill 375.

PROJECT DESCRIPTION

Background: PCTPA prepared the 2036 RTP, an update to the 2035 RTP, in 2016. An EIR for the 2036 RTP was released to the public and responsible agencies on November 3, 2015 and the Final EIR for the 2036 RTP was released on February 8, 2016. The Final 2036 RTP was released on February 12, 2016.

The 2040 RTP update for Placer County (the proposed project) will align the transportation project list with that of the SACOG 2020 MTP/SCS anticipated for release in fall 2019. PCTPA is coordinating closely with SACOG on the development of demographics, transportation project lists, and revenue forecasts due to the comparable timelines.

2040 RTP: The proposed project is the adoption and implementation of the 2040 Placer County Regional Transportation Plan (RTP). The RTP contains three primary elements: Policy Element, Action Element, and Financial Element.

The **Policy Element** presents guidance to decision-makers of the implications, impacts, opportunities, and regional improvement strategy that will be used to implement the RTP. California law (Government Code Section 65080 (b)) states that each RTP shall include a Policy Element that:

1. Describes the transportation issues in the region;
2. Identifies/quantifies regional needs expressed within both short/long range horizons; and,
3. Maintains internal consistency with the Financial Element and fund estimates.

The **Action Element** identifies short- and long-term actions needed to achieve the RTP's objectives and implement the RTP in accordance with the goals, objectives, and policies set forth in the Policy Element.

The **Financial Element** identifies the current and anticipated revenue sources and financing techniques available to fund the fiscally constrained transportation investments described in the Action Element. It includes regionally significant multimodal projects that currently have funding

in place or that are projected to have funding in the future (Fiscally Constrained), while it also identifies other improvement projects that are needed but do not have funding (Fiscally Unconstrained). It also identifies potential funding shortfalls and sources for the unconstrained project list.

Program EIR: The California Environmental Quality Act (CEQA) Guidelines requires that a Program Environmental Impact Report (PEIR) must be prepared for a plan which is “reasonably expected to result in potentially significant environmental effects, if implemented”. Accordingly, a PEIR will be prepared and certified for the 2040 RTP.

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (E.G. PERMITS, FINANCING APPROVAL, OR PARTICIPATION AGREEMENT)

PCTPA will be the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050. The Initial Study and Notice of Preparation will be circulated for agency and public review for 30 days, pursuant to CEQA Guidelines, Section 15073(d).

No specific permits are required by any other responsible or trustee agencies to approve the proposed project. However, there are numerous permits and approvals that may be required to implement the improvements identified in the RTP. The following additional agency approvals apply to the proposed project: County of Placer, City of Auburn, City of Roseville, City of Rocklin, City of Lincoln, City of Colfax, Town of Loomis, and California Department of Transportation (Caltrans).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

X	Aesthetics	X	Agriculture and Forestry Resources	X	Air Quality
	Biological Resources	X	Cultural Resources	X	Energy
	Geology and Soils	X	Greenhouse Gases		Hazards and Hazardous Materials
	Hydrology and Water Quality	X	Land Use and Planning		Mineral Resources
	Noise	X	Population and Housing		Public Services
	Recreation	X	Transportation	X	Tribal Cultural Resources
	Utilities and Service Systems		Wildfire	X	Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
X	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

EVALUATION INSTRUCTIONS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significant.

EVALUATION OF ENVIRONMENTAL IMPACTS

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- **Potentially Significant Impact.** This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- **Less than Significant With Mitigation Incorporated.** This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- **Less than Significant Impact.** A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- **No Impact.** These issues were either identified as having no impact on the environment, or they are not relevant to the project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 21 environmental topic areas.

I. AESTHETICS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect on a scenic vista?	X			
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	X			
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	X			
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	X			

Responses to Checklist Questions

Responses a), b), c), d): It has been determined that the potential impacts on aesthetics caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the four environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact on aesthetics. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the environmental impact report.

II. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	X			
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	X			
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?	X			
d) Result in the loss of forest land or conversion of forest land to non-forest use?	X			
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	X			

Responses to Checklist Questions

Responses a), b), c), d), e): It has been determined that the potential impacts on agriculture and forestry resources caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the five environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact on agriculture and forestry resources. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the environmental impact report.

III. AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	X			
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	X			
c) Expose sensitive receptors to substantial pollutant concentrations?	X			
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	X			

Responses to Checklist Questions

Responses a), b), c), d): It has been determined that the potential impacts on air quality caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the four environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact on air quality. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the environmental impact report.

IV. BIOLOGICAL RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		X		

Background

Placer County extends from the Nevada State line across the Sierra Nevada, through the Sierra Nevada foothills and into the southern portion of the Sacramento Valley. The topography of Placer County varies greatly, ranging from flat areas and rolling grassland in the west to foothills in the central area and rugged mountain terrain in the eastern portions of the county. The county's topographical features range from the alpine habitat of the Sierra Nevada to the grasslands of the valley floor, and consequently the flora and fauna found within the county is extremely diverse.

The major western Placer County watersheds include Dry Creek, Pleasant Grove Creek, and Auburn Ravine and surrounding tributaries. The Dry Creek watershed comprises about 116 square miles in Placer and Sacramento Counties. Its headwaters are located in the upper portions of the Loomis Basin, draining the I-80 corridor from Newcastle and Penryn to Granite Bay, Roseville, and parts of Orangevale and Sacramento County. Dry Creek flows through Rio Linda before emptying into the Northeast Main Drain Canal/Steelhead Creek. Pleasant Grove Creek generally drains the watershed between Dry Creek and Auburn Ravine. Its headwaters are just north of Penryn Ridge, flowing through Rocklin and Roseville and then through unincorporated

Placer County west of Roseville into the Pleasant Grove Creek Canal in Sutter County. The Auburn Ravine watershed begins in the City of Auburn and drains much of the western Placer foothills and the City of Lincoln. Auburn Ravine then flows west through Placer County, to the Eastside Canal and Sacramento River in Sutter County.

The County consists of a mosaic of agricultural and urban environments that have been drastically altered from their native state by human activities, as well as native habitat types that are largely undisturbed. Aquatic habitat types remaining in the County are represented by lakes, streams, rivers, and wetlands, and this aquatic environment supports a rich fishery. Climatic and physiographic differences distinguish the various terrestrial and aquatic communities. Unique biological resources are contained within each of these habitats. In addition to providing habitat for resident wildlife and plant species, this region also functions as an important dispersal corridor for wildlife and a vital link in the migratory pathway of the Pacific Flyway.

Regional Habitat

The California Wildlife Habitat Relationship (CWHR) habitat classification scheme has been developed to support the CWHR System, a wildlife information system and predictive model for California's regularly-occurring birds, mammals, reptiles and amphibians. When first published in 1988, the classification scheme had 53 habitats. At present, there are 59 wildlife habitats in the CWHR System: 27 tree, 12 shrub, 6 herbaceous, 4 aquatic, 8 agricultural, 1 developed, and 1 non-vegetated.

Habitat within Placer County can be grouped within the following categories: herbaceous, shrub, mixed conifer and hardwood forest/woodland, hardwood forest/woodland, conifer forest/woodland, and sparsely vegetated (urban, agricultural, aquatic). See Figure 2, which shows the land cover types within Placer County. Habitat in Placer County can be further classified as follows: Alfalfa, annual grassland, barren (rock outcrops, cliffs), blue oak woodland, disturbed lands, eucalyptus woodland, foothill chaparral, fresh emergent wetland, interior live oak woodland, irrigated pasture, lacustrine, landscape and golf course ponds, mixed oak woodland, oak woodland savanna, oak-foothill pine woodland, orchard, pasture, rice, riverine, row crop, rural residential, rural residential forested, seasonal wetland, spring and seep, stock pond, unidentified cropland, urban golf courses, urban parks, urban riparian, urban wetland, urban woodland, urban/suburban, valley foothill riparian, valley oak woodland, vernal pool grassland complex, and vineyard.

Salmon and Steelhead Trout Fisheries

Salmon and steelhead trout are anadromous fish species that are present in the Bay Delta and San Joaquin and Sacramento River Basins. Anadromous fish are born in freshwater rivers and streams, and then migrate to the Pacific Ocean to grow and mature before returning to their place of origin to spawn. The San Joaquin and Sacramento River system produces most of the Chinook salmon (*Oncorhynchus tshawytscha*) and a large percentage of the steelhead trout (*Oncorhynchus mykiss*) in California.

Anadromous fish resources once flourished naturally in the San Joaquin and Sacramento River system, but as a result of habitat destruction from water storage/diversion projects, mining, sedimentation, and bank degradation, they are protected species under the Endangered Species Act. The San Joaquin and Sacramento River system has historically supported steelhead trout and four distinct spawning runs of Chinook salmon: fall, late fall, winter, and spring. The salmon runs have declined since the late 1800s and are now characterized as episodic. The Central Valley steelhead was federally listed as threatened in 2003. The fall/late fall-run salmon is a federal and

state species of concern, and a candidate species for federal listing. The spring-run Chinook salmon population is listed as threatened by both federal and state agencies. Winter-run Chinook salmon population is listed as a federally and state endangered species. Populations of Central Valley Steelhead and Chinook salmon are supported by hatcheries within the San Joaquin and Sacramento River Basin, but they also reproduce naturally in some tributaries including areas within Placer County.

Water remaining behind the dams by the start of the spawning run in October is often warmed by summer heat. Warm water and low water elevation are harmful to most coldwater anadromous fish species. Riparian vegetation is critical for the maintenance of high-quality fish habitat. It provides cover, controls temperature, stabilizes stream banks, provides food, and buffers streams from erosion and impacts of adjacent land uses. Riparian vegetation also affects stream depth, current velocity, and substrate composition. The decline of riparian communities in California is a factor contributing to the loss of high-quality fish habitat.

Special Status Species

The California Natural Diversity Data Base (CNDDDB) search identified several documented special-status species within the County. All species are presumed present at any given time throughout their habitat range. Some species require localized micro-habitats, while others are highly mobile and may occur throughout the County. Many of the documented special-status species may be directly or indirectly affected by RTP projects within the planning area if the improvements are to encroach on the species' habitat, or movement corridors.

Wildlife. There are 57 special-status wildlife species that have the potential to occur in the project area. Of these 57 species, 17 species are federally or state listed as endangered, threatened, candidate, or proposed for listing.

Plants. There are 44 special-status plant species that have the potential to occur in the project area. Of the 44 special status plants, one is federally threatened, and two are state endangered.

Sensitive Natural Communities. Some of the terrestrial and wetlands resources found within the project area are of global as well as regional significance and are therefore considered sensitive natural communities. Wetlands, including vernal pools, scattered throughout Placer County, and riparian habitat along major rivers and their tributaries, all provide essential habitat for a host of endangered and threatened plant and animal species. Many other organisms, without official status, depend upon wetlands to complete their lifecycles. The sensitive natural communities within the area that are currently rare enough to be listed in the CNDDDB include the following: Alkali Meadow, Alkali Seep, Big Tree Forest, Northern hardpan vernal pool, and Northern Volcanic Mud Flow Vernal Pool.

Placer County Conservation Program

A Habitat Conservation Plan (HCP) is a federal planning document that is prepared pursuant to Section 10 of the Federal Endangered Species Act (FESA). An approved HCP within a defined plan area allows for the incidental take of species and habitat that are otherwise protected under FESA during development activities.

A Natural Community Conservation Plan (NCCP) is a state planning document administered by California Department of Fish and Wildlife (CDFW). An approved NCCP within a defined plan area allows for the incidental take of species and habitat that are otherwise protected under California Endangered Species Act (CESA) during growth and development activities.

The Placer County Conservation Program (PCCP) is a County-proposed solution to coordinate and streamline the permitting process by allowing local entities to issue state and federal permits. The proposed PCCP is a Habitat Conservation Plan (HCP) under the Federal Endangered Species Act and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. As proposed, the PCCP would include the County Aquatic Resources Program (CARP) to issue permits related to the Federal Clean Water Act (CWA) and the California Fish and Game Code. The CARP component would distinguish the Plan as a nationally unique model of natural resource management. In proposing this streamlined process, both costs and uncertainties would be reduced substantially, thus ensuring a more efficient use of public dollars. Furthermore, the proposed PCCP is a landscape-level plan so that each project would be issued permits based on how it contributes to the County's natural, social, and economic health now and in the future.

The PCCP covers approximately 201,000 acres of Western Placer County. Within the proposed PCCP plan area, 50,000 to 60,000 acres within the available potential acquisition area would become part of a reserve system. This conservation reserve system would preserve many acres of vernal pool habitat (approximately 50 percent of the County's remaining stock of these fragile, seasonal ecosystems). This acreage occurs in the unincorporated County and City of Lincoln areas. The proposed PCCP is designed to ensure that land will be managed to continue to support the survival and well-being of the covered species, as well as the survival of hundreds of other species that are dependent on the same habitat. By proactively addressing the long-term conservation and development needs of the County, the proposed PCCP will strengthen local control over land use and provides greater flexibility in meeting the County's social and economic needs for the future.

The PCCP has been in development since 2001, and has involved the public and other interested in the region's future growth and protection of natural resources. The Planning Agreement was signed in December 2001, the Independent Science Advisors Report was completed in January 2004, and the Administrative Draft PCCP was completed in February 2011. The lead agency will need to execute an Implementing Agreement, and prepare Findings before a federal and state permit is issued. The timing of the PCCP is not known, but may go into effect during the life of the RTP. In December 2018, the Placer County Board of Supervisors voted to adopted an interim in-lieu fee program that can be used to mitigated the impacts of development projects on endangered species, wetlands, agriculture and open space, in advance of PCCP adoption.

Responses to Checklist Questions

Response a): Construction and maintenance activities associated with the RTP projects could result in the direct loss or indirect disturbance of special-status wildlife species or their habitats that are known to occur, or have potential to occur, in Placer County. Impacts on special-status wildlife species or their habitat could result in a substantial reduction in local population size, lowered reproductive success, or habitat fragmentation. Significant impacts on special-status wildlife species associated with RTP projects include:

- increased mortality caused by higher numbers of automobiles on new or widened roads;
- direct mortality from the collapse of underground burrows, resulting from soil compaction;
- direct mortality resulting from the movement of equipment and vehicles through the Project area;
- direct mortality resulting from removal of trees with active nests;

- direct mortality or loss of suitable habitat resulting from the trimming or removal of obligate host plants;
- direct mortality resulting from fill of wetlands features;
- loss of breeding and foraging habitat resulting from the filling of seasonal or perennial wetlands;
- loss of breeding, foraging, and refuge habitat resulting from the permanent removal of riparian vegetation;
- loss of suitable habitat for vernal pool invertebrates resulting from the destruction or degradation of vernal pools or seasonal wetlands;
- abandoned eggs or young and subsequent nest failure for special-status nesting birds, including raptors, and other non-special status migratory birds resulting from construction-related noises;
- loss or disturbance of rookeries and other colonial nests;
- loss of suitable foraging habitat for special-status raptor species; and
- loss of migration corridors resulting from the construction of permanent structures or features.

The design process for each improvement will involve a level of field reconnaissance to precisely identify the potential for impacts to special status species and to identify project specific design measures that can be employed to avoid or lessen an impact. Project specific design measures may include alternative designs to avoid habitats that are considered more sensitive and required for special status species. An impact would occur if a project would result in a take of a special status species or their habitat. If a project would in fact result in an incidental take of a special status species or their habitat it would be required to go through a permit process with the appropriate regulatory agency (i.e. Section 7 consultation with the U.S. Fish and Wildlife Service [USFWS] and/or a Section 2081 consultation with the CDFW).

Permits may also be required from the USFWS and/or CDFW, and possibly by the local governments if a project design cannot avoid disturbance to special status species or their habitat. Permits are issued by regulatory agencies with conditions that are designed to mitigate the impact to the extent practicable. The proposed project does not directly cause an impact to special status species and the design process for individual improvements listed in the proposed project would require that each project be consistent with the policies that are established in the County and City General Plans for the purpose of protecting biological resources, including special status species that their habitat.

Consistency with the County and City policies as well as adopted federal and state regulations that protect special-status species, including their habitat and movement corridors, would ensure that appropriate design measures, including avoidance, if appropriate, are incorporated into the design of each improvement project. Additionally, compliance with the Placer County Conservation Program (PCCP) ensures that special status species are protected to the extent feasible, and mitigation is incorporated as necessary. Because the RTP is a planning document and thus, no physical changes will occur to the environment, adoption of the RTP would not directly impact the environment. There is a reasonable chance that special status species will be impacted throughout the buildout of individual projects identified in the RTP due to the extent of special status species throughout the region. The following mitigation would ensure that any potential for impacts to special status species is reduced to a ***less than significant*** level.

Mitigation Measures

Mitigation Measure BIO-1: *Prior to final design approval of individual projects, the implementing agency shall have a qualified biologist conduct a field reconnaissance of the environmental limits of the project in an effort to identify any biological constraints for the project, including special status plants, animals, and their habitats, as well as protected natural communities including wetland and terrestrial communities. If the biologist identifies protected biological resources within the limits of the project, the implementing agency shall first, prepare alternative designs that seek to avoid and/or minimize impacts to the biological resources. If the project cannot be designed without complete avoidance, the implementing agency shall coordinate with the appropriate regulatory agency (i.e. U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife, Army Corp of Engineers) to obtain regulatory permits and implement project-specific mitigation prior to any construction activities.*

For projects that are located within the PCCP plan area, and are constructed after adoption of the PCCP, the implementing agency shall coordinate with the PCCP administrator to verify whether construction within the study area would require a permit. The permit process will require a field reconnaissance of the project study area by an approved biologist in an effort to identify any biological constraints, including covered species or habitat. If the biologist identifies covered species or habitat within the limits of the study limits the implementing agency shall implement all minimization measures and pay the appropriate mitigation fees or provide land in lieu of fees as established by the PCCP.

Response b), c): The planning area contains sensitive natural communities, such as riparian, oak woodland, streams, rivers, wet meadows, and vernal pools. The planning area contains oak woodland habitat predominately in the foothills. California regulations require a lead agency to determine whether a project within its jurisdiction may result in significant effects to oak woodlands. If an agency determines that there may be a significant effect to oak woodlands as a result of a project, the agency must require oak woodlands mitigation alternatives to mitigate the significant effect. Such mitigation alternatives include: conservation through the use of conservation easements; planting and maintaining an appropriate number of replacement trees; or the contribution of funds for the purpose of purchasing oak woodlands conservation easements.

Streams, rivers, wet meadows, and vernal pools (wetlands and jurisdictional waters) are of high concern because they provide unique aquatic habitat (perennial and ephemeral) for many endemic species, including special-status plants, birds, invertebrates, and amphibians. These aquatic habitats oftentimes qualify as protected wetlands or jurisdictional waters and are protected from disturbance through the CWA.

The planning area contains numerous aquatic habitats that qualify as federally protected wetlands and jurisdictional waters. Section 404 of the CWA requires any project that involves disturbance to a wetland or water of the U.S. to obtain a permit that authorizes the disturbance. If a wetland or jurisdictional water is determined to be present, then a permit must be obtained from the USACE to authorize a disturbance to the wetland. Although subsequent improvements may disturb protected wetlands and/or jurisdictional waters, the regulatory process that is established through Section 404 of the CWA ensures that there is “no net loss” of wetlands or jurisdictional waters. If, through the design process, it is determined that an improvement project cannot avoid a wetland or jurisdictional water, then the USACE would require that there be an equal amount of wetland created elsewhere to mitigate any loss of wetland.

Construction activities associated with several projects, may include, but are not limited to the congestion relief projects, railroad crossings, overpasses or overcrossings, and pedestrian/bicycle projects such as bicycle routes along creek/river corridors, could result in the disturbance or loss of waters of the United States. This includes perennial and intermittent drainages; unnamed drainages; vernal pools; freshwater marshes; and other types of seasonal and perennial wetland communities. Wetlands and other waters of the United States could be affected through direct removal, filling, hydrological interruption (including dewatering), alteration of bed and bank, and other construction-related activities.

Detailed plans of the individual transportation projects identified in the proposed project have not been developed. Consistency with the applicable County and City policies and trustee agency regulations would ensure that appropriate design measures, including avoidance, if appropriate, are incorporated into the design of each improvement project. Because the proposed project is a planning document and thus, no physical changes will occur to the environment, adoption of the proposed project would not directly impact the environment. There is a reasonable chance that natural communities, including wetlands, riparian, or other sensitive natural communities will be impacted throughout the buildout of the individual RTP projects. This impact is could result in adverse effects on wetlands, riparian, or other sensitive natural communities.

The following mitigation measures would ensure that all future projects are designed to avoid sensitive habitat and wetlands to the greatest extent feasible. Where full avoidance is not possible, the participation in pre-established habitat protection programs or state/federal permit mitigation programs would offset any potential impacts associated with project implementation. Adherence to the requirements in these mitigation measures would reduce this impact to a ***less than significant*** level.

Mitigation Measures

Mitigation Measure BIO-2: *Prior to approval of RTP projects, the implementing agency shall retain a qualified biologist to perform an assessment of the project area to identify wetlands, riparian, and other sensitive aquatic environments. If wetlands are present the qualified biologist shall perform a wetland delineation following the 1987 Army Corps of Engineers Wetlands Delineation Manual. The wetland delineation shall be submitted to the ACOE for verification.*

Mitigation Measure BIO-3: *If wetlands, riparian, or other sensitive aquatic environments are found within the project area, the implementing agency shall design or modify the project to avoid direct and indirect impacts on these habitats, if feasible. Additionally, the implementing agency shall minimize the loss of riparian vegetation by trimming rather than removal where feasible.*

Prior to construction, the implementing agency shall install orange construction barrier fencing to identify environmentally sensitive areas around the wetland (20' from edge), riparian area (100' from edge), and other aquatic habitats (250' from edge of vernal pool). The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The fencing will be installed before construction activities are initiated and will be maintained throughout the construction period. The following paragraph will be included in the construction specifications:

"The Contractor's attention is directed to the areas designated as "environmentally sensitive areas." These areas are protected, and no entry by the Contractor for any purpose will be allowed unless specifically authorized in writing by the implementing agency. The Contractor will take measures to ensure that Contractor's forces do not enter or disturb these areas, including giving written notice to employees and subcontractors."

Temporary fences around the environmentally sensitive areas will be installed as the first order of work. Temporary fences will be furnished, constructed, maintained, and removed as shown on the plans, as specified in the special provisions, and as directed by the project engineer. The fencing will be commercial-quality woven polypropylene, orange in color, and at least 4 feet high (Tensor Polygrid or equivalent). The fencing will be tightly strung on posts with a maximum 10-foot spacing.

Immediately upon completion of construction activities the contractor shall stabilize exposed soil/slopes. On highly erodible soils/slopes, use a nonvegetative material that binds the soil initially and breaks down within a few years. If more aggressive erosion control treatments are needed, geotextile mats, excelsior blankets, or other soil stabilization products will be used. All stabilization efforts should include habitat restoration efforts.

Mitigation Measure BIO-4: *If wetlands or riparian habitat are disturbed as part of the individual RTP project, the implementing agency shall compensate for the disturbance to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state, federal, and local agencies as part of the permitting process for the project. Compensation may comprise onsite restoration/creation, off-site restoration, preservation, or mitigation credits (or a combination of these elements). The implementing agency shall develop and implement a restoration and monitoring plan that describes how the habitat shall be created and monitored over a minimum period of time.*

Response d): There are many native fish and wildlife species within the County that migrate or utilize movement corridors. The most notable for their protection status include the Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead trout (*Oncorhynchus mykiss*). Salmon and steelhead trout are anadromous fish species that are present in the San Joaquin and Sacramento River Basins. The Sacramento River system has historically supported steelhead trout and four distinct spawning runs of Chinook salmon: fall, late fall, winter, and spring. The Central Valley steelhead was federally listed as threatened in 2003.

The fall/late fall-run salmon is a federal and state species of concern, and a candidate species for federal listing. The spring-run Chinook salmon population is listed as threatened by both federal and state agencies. Winter-run Chinook salmon population is listed as a federally and state endangered species. Populations of Central Valley Steelhead and Chinook salmon have been supported by hatcheries within the River Basins, as well as small tributaries.

The individual transportation improvements identified in the proposed project have not been designed or approved. Each project will be designed consistent with the applicable County and City policies to ensure that appropriate design measures, including avoidance, if appropriate, are incorporated into the design of each improvement project. It will be important that each transportation project review the potential for impacts to riparian habitat, which is critical for the maintenance of high-quality fish habitat. It provides cover, controls temperature, stabilizes stream banks, provides food, and buffers streams from erosion and impacts of adjacent land uses. Riparian vegetation also affects stream depth, current velocity, and substrate composition.

Because the proposed project is a planning document and thus, no physical changes will occur to the environment, adoption of the proposed project would not directly impact the environment. There is a chance that protected migratory species, including the four distinct salmon runs, and steelhead may be impacted throughout the buildout of transportation improvements identified in the proposed project. The following mitigation measure would ensure that all future projects are designed to facilitate the movement of sensitive species to the greatest extent feasible. Where full design mitigation is not feasible, compliance with state and federal permit requirements

would offset any potential impacts associated with project implementation. Adherence to the requirements this mitigation measure would reduce this impact to a **less than significant** level.

Mitigation Measures

Mitigation Measure BIO-5: *Prior to design approval of RTP projects that contain movement habitat, the implementing agency shall incorporate economically viable design measures, as applicable and necessary, to allow wildlife or fish to move through the transportation corridor, both during construction activities and post construction. Such measures may include appropriately spaced breaks in a center barrier, or other measures that are designed to allow wildlife to move through the transportation corridor. If the project cannot be designed with these design measures (i.e. due to traffic safety, etc.) the implementing agency shall coordinate with the appropriate regulatory agency (i.e. USFWS, NMFS, CDFW) to obtain regulatory permits and implement alternative project-specific mitigation prior to any construction activities.*

Responses e), f): The Placer County Conservation Plan (PCCP) is a joint Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP) that is currently being prepared for the western half of Placer County. The PCCP is being prepared by Placer County under the guidance of local citizens (the Stakeholder Committee) and government officials. Participating agencies include: Placer County, the City of Lincoln, the Placer County Water Agency (PCWA), and the South Placer Regional Transportation Authority (SPRTA).

The PCCP is a voluntary resources protection and management tool that balances the needs of endangered and threatened species with the needs of landowners, land developers, and local and state public agencies. Such a comprehensive HCP/NCCP assures that species protection occurs on a regional level, versus local or parcel level, and it assures participating entities that once the agencies have approved the HCP/NCCP, they will not be required to accept species restrictions or financial commitments beyond those agreed to in the HCP/NCCP.

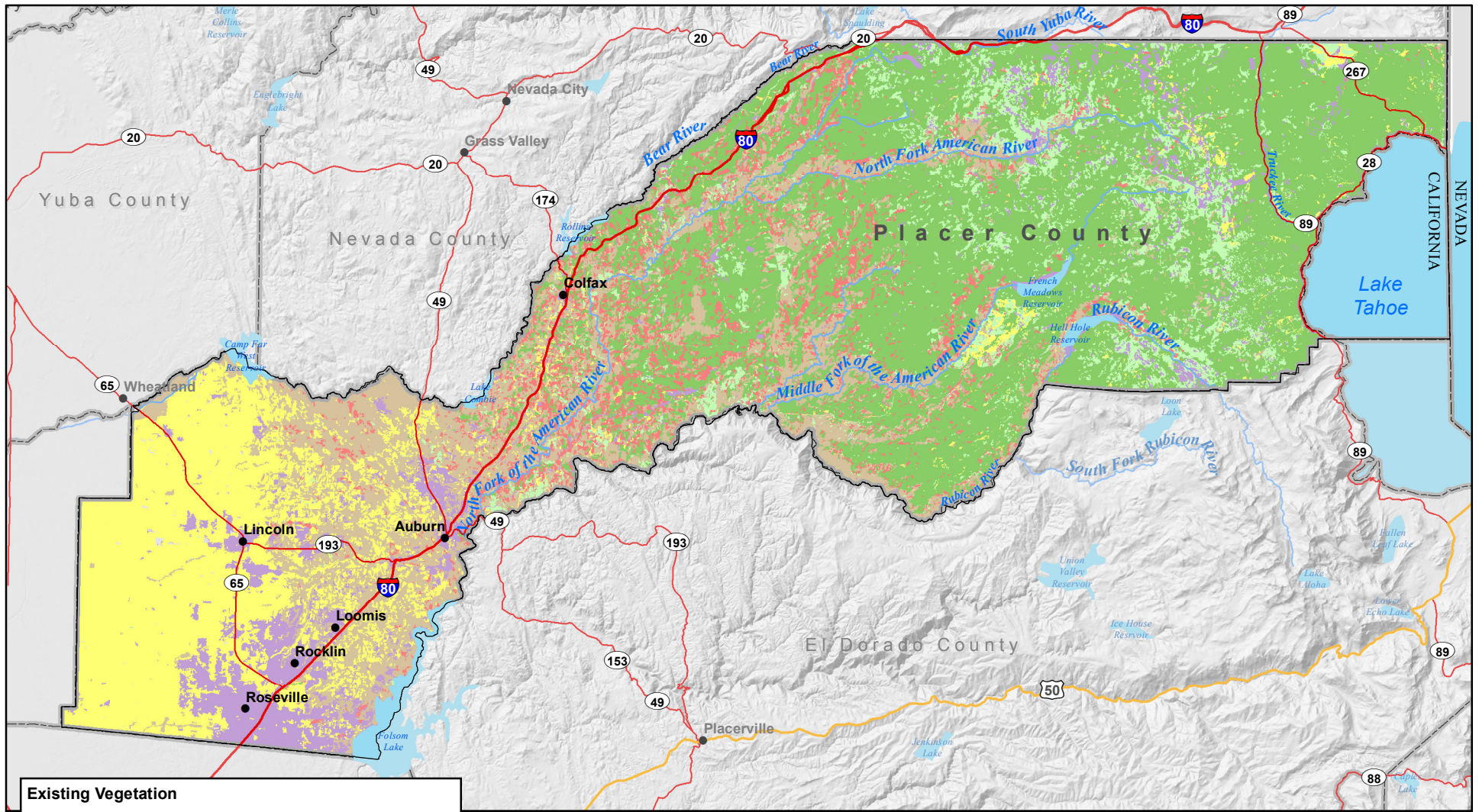
The PCCP is currently in the planning process with significant progress made over the past 14 years. Once it is completed, the PCCP will establish a coordinated process for permitting and mitigating the incidental take of endangered species throughout the PCCP planning area. This process creates an alternative to the current project-by-project approach. Rather than individually surveying, negotiating, and securing compensatory mitigation as typically occurs through project by project mitigation, once the PCCP is in place, project proponents will receive an incidental take permit by simply paying a compensatory fee (in some cases, dedication of on-site mitigation can be an alternative to paying a fee) for use to purchase compensatory habitat lands or easements.

After the PCCP is adopted, individual projects that occur in the PCCP planning area would need to be coordinated with Placer County (or the designated agency responsible for implementing the PCCP) to ensure that the project does not conflict with the PCCP. Because the PCCP is not yet adopted, there is currently no potential for conflict with this document. However, the PCCP may be completed within the implementation horizon for the proposed project and individual projects will need to be designed such that they do not conflict with the PCCP. Implementation of the following mitigation measure would ensure that any potential for conflict is reduced to a **less than significant** level. It should be noted that the PCCP only covers a portion of the RTP planning area and any RTP projects outside the PCCP area would not be subject to the PCCP.

Mitigation Measures

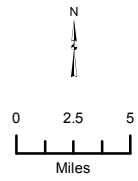
Mitigation Measure BIO-6: *If the PCCP has been adopted, prior to design approval of individual projects, the implementing agency shall coordinate with Placer County (or the designated agency*

responsible for implementing the PCCP) to determine the appropriate coverage, permits, compensatory mitigation or fees, and project specific avoidance, minimization, and mitigation measures.



Existing Vegetation

- Conifer forest/woodland
- Hardwood forest/woodland
- Herbaceous
- Mixed conifer and hardwood forest/woodland
- Non and Sparsely Vegetated - Urban, Agriculture or Aquatic
- Shrub



2040 PLACER COUNTY RTP

Figure 2: Land Cover Types
Wildlife-Habitat Relationship System Lifeforms

Data sources: USDA Forest Service Pacific Southwest Region CALVEG Zone 3 North Sierra 2000-2009 v1 and Zone 5 Central Valley 1998-2007 v1; California Spatial Information Library; Placer County GIS. Map date: May 29, 2019

V. CULTURAL RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	X			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	X			
c) Disturb any human remains, including those interred outside of formal cemeteries?	X			

Responses to Checklist Questions

Responses a), b), c): It has been determined that the potential impacts on cultural resources caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the three environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact on cultural resources. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the environmental impact report.

VI. ENERGY

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	X			
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	X			

Responses to Checklist Questions

Responses a), b): It has been determined that the potential impacts on energy caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the two environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact on energy. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered *potentially significant* until a detailed analysis is prepared in the environmental impact report.

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.		X		
ii) Strong seismic ground shaking?		X		
iii) Seismic-related ground failure, including liquefaction?		X		
iv) Landslides?		X		
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Background

Regional Setting

Located within a portion of the Greater Sacramento Valley and the Sierra Nevada range, Placer County straddles distinct geophysical regions. The eastern portion of the county includes hilly and mountainous terrain of the Sierra Nevada range, while the western portion of the County lies in the lowlands of the Sacramento Valley. The county also has a wide range of water resources, and includes large portions of the north and middle forks of the American River and Folsom Lake.

The Sacramento Valley is formed by the Great Valley geosyncline, which is a large, elongated, northwest-trending asymmetric structural trough. It is bordered by the Coast Ranges to the west, the Klamath Mountains and Cascade Range to the north, and the Sierra Nevada range to the east. The geologic formations of the Great Valley on the east side of the Sacramento Valley are thick sequences of alluvial (river-deposited) sediments derived from erosion of the granitic rocks of the Sierra Nevada. The Sierra Nevada, lying to the east of the Sacramento Valley, underlies the Sierra Nevada range.

Fault Systems/Seismicity

Placer County lies between two seismically active regions in the western United States. Tectonic stresses associated with the North American-Pacific Plate boundary can generate damaging earthquakes along faults 30 to 100 miles to the west of the County. Extreme eastern Placer County borders the Basin and Range province that entails most of Nevada and western Utah. This area is riddled with active faults that are responsible for and form the boundary between each basin or valley and the neighboring mountain range. "Active" faults, which represent the highest earthquake hazard, are those that have ruptured to the ground surface during the Holocene period (about the last 11,000 years).

The closest recently active fault in the western Sierra Nevada foothills is the Cleveland Hills fault, which is situated approximately 36 miles northwest of Auburn. This fault was the source of the 1975 Oroville earthquake (Richter Magnitude: 5.7), which was felt strongly in Placer County and neighboring areas. Another potential earthquake source is the Midland Fault Zone on the western side of the Sacramento Valley, where in 1892 an earthquake centered between the cities of Vacaville and Winters caused minor damage in the City of Lincoln.

Placer County itself is traversed by a series of northwest trending-faults that are related to the Sierra Nevada uplift. Although portions of western and eastern Placer County are located in a seismically active region, no known faults actually go through any of the cities or towns. However, the Bear Mountain and the Melones faults are situated approximately three to four miles westerly and easterly from the City of Auburn respectively. It is reported that an estimated 4.0+ Richter magnitude earthquake occurred between Auburn and Folsom in 1908 with an epicenter possibly associated with the Bear Mountain fault. Earthquakes on these faults would have the greatest potential for damaging buildings in Auburn, especially the unreinforced masonry structures in the older part of the communities where homes were built before 1960 without adequate anchorage of framing and foundations. Similar lower magnitude but nearby earthquakes are capable of producing comparable damages in several Placer County communities.

Additionally, western Placer County may experience ground shaking from distant earthquakes on faults to the west and east. For example, to the west, both the San Andreas fault (source of the 8.0 estimated Richter magnitude San Francisco earthquake that caused damage in Sacramento in 1906, including the State Capitol, the full extent of which was not discovered until the mid-1970s) and the closer Hayward fault have the potential for experiencing major to great events. To the east in Nevada, there are several faults associated with a series of earthquakes in 1954, especially the major (7.1 Richter magnitude) December 16, 1954 Fairview Peak event (about 100 miles east of Carson City). These events caused no damage in Reno, but there was some damage in Sacramento, probably because of the soft soil conditions. It is not clear if any Placer County communities experienced any damage from these events.

The California legislature passed the Alquist-Priolo Special Studies Zone Act in 1972 to address seismic hazards associated with faults and to establish criteria for developments for areas with identified seismic hazard zones. No special study zones are located in Placer County.

Placer County is classified as a Seismic Zone 3, which is defined by the Uniform Building Code with special standards and regulations based on the potential impacts from seismic activity.

Liquefaction/Lateral Spreading/Landslides

Liquefaction typically requires a significant sudden decrease of shearing resistance in cohesionless soils and a sudden increase in water pressure, which is typically associated with an earthquake of high magnitude. The potential for liquefaction is highest when groundwater levels are high, and loose, fine, sandy soils occur at depths of less than 50 feet.

Map evaluation shows that all parts of Placer County are within 30 miles of at least one of the faults. Thus, all of Placer County has an opportunity for liquefaction damage. Sites in Placer County having liquefaction potential are those on alluvial deposits having groundwater and sand or silt layers of uniform grain size within about 30 feet of the surface. In Placer County, alluvial geological units Q, Q_a, Q_b, Q_r, and Q_{mr} on the Sacramento quadrangle and units Q_{al}, Q_t, Q_c, and Q_l on the Chico quadrangle should be considered potential liquefaction areas where groundwater is less than 30 feet deep (Placer County, 1994).

Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is directly associated with areas of liquefaction. Portions of Placer County that are susceptible to this hazard include but are not restricted to areas located in the foothills of the county and the steep banks along the major rivers.

Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill). The zone of landslide opportunity for magnitude 6.5 earthquakes is approximately 75 miles, indicating that failure of all unstable slopes in Placer County could be triggered by major earthquakes. Although most natural slopes in Placer County are considered stable, landslides and slope failure have occurred in the past. Some landslides considered currently active and potentially active areas include the Valley Springs Tuff (Alta and I-80) and the Metavolcanic flows (Canyons of the N. Fork of the American River).

Other Geologic Considerations

Expansive Soils: Some soils have a potential to swell and shrink as they absorb water and then dry out. These expansive soils generally contain clays that expand when moisture is absorbed into the crystal structure. Expansive soils, or soils considered to have moderate to high shrink-swell potential, are limited to low-lying areas, which are concentrated in western Placer County, from the City of Rocklin to the county line.

Erosion: Erosion naturally occurs on the surface of the earth as surface materials (i.e. rock, soil, debris, etc.) is loosened, dissolved, or worn away, and transported from one place to another by gravity. Two common types of soil erosion include wind erosion and water erosion. The steepness of a slope is an important factor that affects soil erosion. Erosion potential in soils is influenced primarily by loose soil texture and steep slopes. Loose soils can be eroded by water or

wind forces, whereas soils with high clay content are generally susceptible only to water erosion. The potential for erosion generally increases as a result of human activity, primarily through the development of facilities and impervious surfaces and the removal of vegetative cover. Most soils in central and eastern Placer County are subject to high erosion potential and some soils have moderate to very high erosion potential.

Subsidence: Land subsidence is the gradual settling or sinking of an area with little or no horizontal motion due to changes taking place underground. It is a natural process, although it can also occur (and is greatly accelerated) as a result of human activities. Common causes of land subsidence from human activity include: pumping water, oil, and gas from underground reservoirs; dissolution of limestone aquifers (sinkholes); collapse of underground mines; drainage of organic soils; and initial wetting of dry soils.

Response a.i-ii): Although there are no Alquist-Priolo Earthquake Fault Zones with Placer County, the county does have several active and potentially active faults. There will always be a chance that a fault located anywhere in the state (or region) could rupture and cause seismic ground shaking. All projects would be required to conduct seismic hazard evaluations and comply with all appropriate roadway and bridge seismic design provisions. With the implementation of the following mitigation measure, the proposed project would result in a ***less than significant*** impact from rupture of an earthquake fault and seismic ground shaking.

Mitigation Measures

Mitigation Measure GEO-1: Conduct project-level seismic hazard evaluations and design those project facilities according to the seismic design requirements for roads and bridges. Implementing agencies shall ensure evaluations of seismic ground shaking hazards for all individual improvement projects at the project-level. Based on these evaluations, the implementing agencies shall ensure that design and construction of all new facilities are constructed in accordance with the most appropriate building standards to minimize the potential impacts to new facilities.

Response b): Some of the individual RTP improvement projects would involve some land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. Most soils in central and eastern Placer County are subject to high erosion potential and some soils have moderate to very high erosion potential. Construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters. The Regional Water Quality Control Board will require a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each transportation improvement that disturbs an area one acre or larger. The SWPPPs will include project specific best management measures that are designed to control drainage and erosion. The proposed project would be required to implement Mitigation Measures HYDRO-1 and HYDRO-2, as provided in *Section X: Hydrology and Water Quality*.

Mitigation Measures

Implement Mitigation Measures HYDRO-1 and HYDRO-2.

Response a.iii-v), c): Liquefaction typically requires a significant sudden decrease of shearing resistance in cohesionless soils and a sudden increase in water pressure, which is typically associated with an earthquake of high magnitude. Some areas within Placer County are subject to liquefaction. Sites in Placer County having liquefaction potential are typically those on alluvial deposits having groundwater and sand or silt layers of uniform grain size within about 30 feet of the surface.

In the case of a major earthquake, some areas in Placer County would also be subject to landslide, lateral spreading, subsidence, and/or collapse. Portions of Placer County exist on hilly and/or mountainous terrain, where risk of landslide, lateral spreading, subsidence, and collapse are greater. In particular, areas near the Lake Tahoe Basin, where earthquake risk is high, there is a relatively high potential for some areas to be subject to one or more of these geological risks.

Each improvement project would be required to have a specific geotechnical study prepared and incorporated into the improvement design. The geotechnical study would provide recommendations for mitigating any potential risk associated with site specific conditions. Implementation of project specific geotechnical engineering measures would reduce the safety risks of landslides, lateral spreading, subsidence, or liquefaction to a reasonable level. With the implementation of the following mitigation measure, the proposed project would result in a ***less than significant*** impact from these issues.

Mitigation Measures

Mitigation Measure GEO-2: *Conduct site-specific geotechnical investigations for liquefaction, slope stability, lateral spreading, settlement, and subsidence. Implementing agencies shall ensure that site-specific geotechnical investigations are conducted before or during the preliminary and/or final design stages of the individual RTP improvement projects to identify and characterize areas that may be susceptible to these geological conditions. These site-specific investigations may range from limited screening investigations to identify obvious hazards, to very detailed subsurface investigations. The findings of these site-specific investigations shall serve as the basis for the final design of the proposed projects and ensure that appropriate geotechnical methods are used to avoid or minimize the potential for damage to project-related facilities.*

Response d): Expansive soils are those that shrink or swell with the change in moisture content. The volume of change is influenced by the quantity of moisture, by the kind and amount of clay in the soil, and by the original porosity of the soil. Shrinking and swelling can damage roads and other structures unless special engineering design is incorporated into the project plans.

Soils with moderate to high shrink-swell potential (i.e. potentially expansive soils) occur throughout the county. In Placer County, expansive soils are limited to low-lying areas, which are concentrated in western Placer County, from the City of Rocklin to the county line. Transportation improvements proposed under the 2040 RTP could be located in portions of the county where expansive soils and sediments are present. Many of the projects proposed in the 2040 RTP would occur within existing transportation corridors where expansive soils have already been removed or treated. New transportation facilities, however, could encounter expansive soils. If located at or near the finished grade of the proposed improvements, expansive soils could cause substantial damage to improperly designed and constructed project facilities and result in injury to people using these facilities.

Each improvement project would be required to have a specific geotechnical study prepared and incorporated into the improvement design. The geotechnical study would identify the specific soil conditions that may contribute to soil expansion. Based on specific findings at each locality, the geotechnical engineer will recommend detailed engineering measures that are necessary to reduce the risks associated with soil expansion. Implementation of project specific geotechnical engineering measures would reduce the risks from soil expansion to a reasonable level. With the implementation of the following mitigation measure the proposed project would result in a ***less than significant*** impact from expansive soils.

Mitigation Measures

Mitigation Measure GEO-3: *Conduct site-specific geotechnical investigations for expansive soils and implement appropriate, proven geotechnical methods. Implementing agencies shall conduct site-specific geotechnical investigations before or during the preliminary and/or final design stages of the individual RTP improvement projects to identify areas with expansive soils. The findings of these site-specific investigations shall serve as the basis for the final design of the proposed projects and ensure that appropriate, proven geotechnical methods are used to avoid or minimize the potential for expansive soils and sediments to damage project-related structures. The exact methods that would be used to address potential expansive soil issues may include the selective placement of expansive fill materials; the use of imported, non-expansive fill materials; or other methods of ground improvement.*

Response e): The RTP would not result in the generation of sewer water or the expansion of septic infrastructure. Implementation of the proposed project would have **no impact** relative to this topic.

Response f): The RTP would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. An analysis of the proposed project's potential to impact cultural and tribal resources will be provided in the environmental impact report, which will include an analysis of the proposed project's potential to destroy a unique paleontological feature. The proposed project would be required to implement all mitigation as contained in the Cultural and Tribal Resources section of the environmental impact report, which would also apply to paleontological resources. Additionally, the RTP would not destroy a geological feature since development of the proposed project would occur primarily above-ground, and heavy drilling and blasting (i.e. tunnel blasting) would be minimal and only occur (if at all) along existing right of way (where their unique geological features are not present). Therefore, implementation of the proposed project would have a **less than significant** impact relative to this topic.

VIII. GREENHOUSE GAS EMISSIONS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	X			
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	X			

Responses to Checklist Questions

Responses a), b): The U.S. EPA has reported that the transportation sector directly accounted for upwards of 30 percent of the total GHG emissions in the US. They have also reported that transportation is the fastest-growing source of GHGs in the U.S. Over the past century GHG concentrations in the earth's atmosphere have been gradually increasing, and most scientists postulate that increases in the earth's average temperature are the result of increases in concentrations of GHG.

The California legislature passed the California Global Warming Solutions Act in 2006 through Assembly Bill 32 (AB-32), the Sustainable Communities and Climate Protection Act in 2009 through Senate Bill 375 (SB-375) and the California Global Warming Solutions Act of 2006: emissions limit through Senate Bill 32 (SB 32). These laws address the need for regional strategies to reduce greenhouse gas emissions in California. In particular, SB 375 sets GHG targets for the entire six-county Sacramento region, and specifies SACOG as having responsibility for calculating and coordinating the region's GHG reduction efforts. Furthermore, the Attorney General has provided legal insight and recommendations to the public through opinion papers.

It has been determined that the potential impacts on greenhouse gases caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the two environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact on greenhouse gases. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the environmental impact report.

IX. HAZARDS AND HAZARDOUS MATERIALS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

Background

Hazardous Materials

Under Title 22 of the California Code of Regulations (CCR), the term hazardous substance refers to both hazardous materials and hazardous wastes. Both of these are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity (CCR Title 22, Chapter 11, Article 3). A hazardous material is defined as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness, or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, or contaminated or are being stored until they can be disposed of properly (CCR Title 22, Chapter 11, Article 2, Section 66261.10). While hazardous substances are regulated by multiple agencies, cleanup requirements are determined on a case-by-case basis according to the agency with lead jurisdiction over the project.

Public health is potentially at risk whenever hazardous materials are, or will, be used. It is necessary to differentiate between the “hazard” of these materials and the acceptability of the “risk” they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The risk to health and public safety is determined by the probability of exposure, in addition to the inherent toxicity of a material (California Department of Toxic Substances Control, <http://www.dtsc.ca.gov/>).

Factors that can influence the health effects when human beings are exposed to hazardous materials include: the dose the person is exposed to, the frequency of exposure, the duration of exposure, the exposure pathway (route by which a chemical enters a person’s body), and the individual’s unique biological susceptibility.

Transportation of Hazardous Materials

The transportation of hazardous materials within the State of California is subject to various federal, State, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading of such materials (California Vehicle Code §§ 31602(b), 32104(a)). The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users.

Airport Operations Hazards

Hazards associated with airport operations are generally associated with aircraft accidents. Aircraft accidents of most concern occur during takeoff and landing operations during which aircraft are operated close to the ground and within close proximity to one another. Potential hazards around an airport can be increased due to many external factors such as incompatible land uses in the vicinity of the airport, installation of power transmission lines, wildlife hazards (i.e., bird strikes, migrating wildlife, etc.), and construction of tall structures.

In order to mitigate the potential hazards of tall structures within the vicinity of an airport, the Federal Aviation Administration (FAA) established an airport height restriction area, defined by Federal Aviation Regulation (FAR) Part 77. FAR Part 77 establishes “imaginary surfaces” around an airport where a structure is considered to pose a hazard to an aircraft. FAR Part 77 requires that the FAA be notified prior to construction of any structure that would pierce these imaginary surfaces. However, the FAA cannot prohibit the construction of such structures. The State of California goes further, requiring that a permit be obtained from the State Division of Aeronautics prior to construction of such a structure.

In addition to imaginary surfaces, a safety restriction area is established around airports within which it is assumed that hazards may exist to people or structures on the ground in the event of an aircraft accident. Nationwide studies of aircraft accidents have found the following:

- Almost half of all accidents occur on airport property.
- An additional 15 percent of aircraft accidents occur outside airport property but within one mile of the airport runway(s).
- A substantial concentration of aircraft accidents occur within the initial climb-out and the final approach sectors of airports.

Further refinement of this data points to an increased risk near the ends of the runway and under the airport traffic pattern. In order to reduce these risks, especially those related to land use in these areas, safety restriction areas are established around airports which restrict certain land uses in the vicinity of the airport. Typically, three types of areas are established. The clear zone is an area at each end of the runway(s) within 200 feet of the runway threshold. The clear zone is the most restrictive safety area. The approach/departure zone extends beyond the clear zone and is aligned with the runway as well. The overflight zone represents the area commonly overflown by aircraft utilizing the airport. The overflight zone surrounds the airport and is the least restrictive safety area.

Imaginary surfaces and safety restriction areas are established as part of the Comprehensive Land Use Plan (CLUP) or Airport Land Use Plan (ALUP) for the airport. Prepared and approved by the local Airport Land Use Commission, the CLUP or ALUP establishes guidelines for development in the vicinity of the airport in the areas of noise impacts, safety hazards, and height restriction.

Responses to Checklist Questions

Response a): Construction of the individual RTP projects may involve the transportation, use, and/or disposal of hazardous materials, which may involve the use of equipment that contains hazardous materials (e.g., solvents and fuels, diesel-fueled equipment), or the transportation of excavated soil and/or groundwater containing contaminants from areas that are identified as being contaminated. However, the transportation of hazardous materials is heavily regulated and monitored by federal, state, and local regulations and policies. All transportation of hazardous materials, if any, will be required to comply with all existing regulations and policies. Compliance with all existing regulations and policies would ensure that the impact would be *less than significant*, and no additional mitigation is required.

Response b):

Hazardous Solvents and Architectural Coatings: The construction and maintenance of individual RTP projects would involve the use of fuels, solvents, architectural coatings, and other chemicals that may be considered hazardous if not properly used. Typically, “leftover” materials are used on other projects when possible. In any case, the handling and disposal of these products would be governed according to regulations enforced by local fire departments, Certified Unified Program Agencies (CUPAs), the State Division of Occupational Safety and Health, and the Department of Toxic Substances Control. In addition, regulations under the federal and state Clean Water Act require contractors to avoid allowing the release of materials into surface waters. Compliance with the existing regulatory environment would ensure that this impact would be *less than significant*.

Asbestos: The construction of RTP projects within areas that are known to have naturally occurring asbestos, or areas where asbestos is contained with existing structures, could lead to the disturbance and release of asbestos fibers. Earthmoving, excavation, and demolitions of materials containing asbestos requires monitoring to ensure that they are not used as soil or fill materials, and that they are properly disposed of in accordance with federal and state regulations.

Conclusion: Based upon the regional nature of the RTP, development of detailed, site-specific information on this impact at an RTP planning level is not feasible. The implementing agency of each RTP project will conduct appropriate project-level assessments and will be responsible for consideration of mitigation measures for significant effects on the environment. If asbestos is deemed present, an Asbestos Hazard Dust Mitigation Plan would be prepared to ensure that

adequate dust control and asbestos hazard mitigation measures are implemented during project construction. Implementation any applicable mitigation measures presented in the Air Quality section of the environmental impact report would ensure that this potential impact is reduced to a ***less than significant*** level.

Response c): According to the Placer County School Directory, there are approximately 140 schools within Placer County. Because of the regional nature of the transportation improvements, some will inevitably be located within ¼ mile of a school. Hazardous materials used in construction of an RTP project in the vicinity of a school, or other sensitive receptors such as hospitals and residences, could be accidentally released. In the event of a hazardous materials spill or release, notification and cleanup operations would be performed in compliance with applicable federal, state, and local regulations and policies, including hazard mitigation plans. Compliance with all existing regulations, policies, and hazard mitigation plans would ensure that the impact would be ***less than significant***, and no additional mitigation is required.

Response d): Any construction activities on, through, or adjacent to contaminated sites could lead to a disturbance and release of hazardous materials. The regulatory agencies, including federal, state, and local agencies, have identified sites that are or were contaminated at some point. Additionally, these agencies continue to pursue investigating properties that could potentially be contaminated and all information is maintained in a database system. Based upon the regional nature of the RTP, development of detailed, site-specific information on this impact at an RTP planning level is not feasible. The implementing agency of each RTP project will conduct appropriate project-level environmental review and will be responsible for consideration of mitigation measures for significant effects on the environment. Implementation of the following mitigation measure would ensure that this potential impact is reduced to a ***less than significant*** level.

Mitigation Measures

Mitigation Measure HAZ-1: *Prior to approval of individual RTP improvement projects, the implementing agency shall perform a Phase 1 Environmental Site Assessment that includes a review of all known databases for contaminated sites. If it is determined that a project is located on or near a contaminated site a Phase II Environmental Site Assessment shall be performed to sample the soils/groundwater and further investigate the extent of the contamination. Based on the results of the Phase II Environmental Site Assessment, the implementing agency shall devise a remediation plan or avoid disturbance of contaminated areas, in compliance with appropriate regulatory agency requirements. All work shall be conducted under a work plan approved by the regulatory oversight agency and should be conducted by a registered environmental assessor (pursuant to 22 CCR 69200).*

Response e): Hazards related with airports are typically grouped into two categories: air hazards and ground hazards. Air hazards jeopardize the safety of an airborne aircraft and expose passengers, pilots and crews to danger. Examples of air hazards include tall structures, glare-producing objects, bird and wildlife attractants, radio waves from communication centers, or other features that have the potential to interfere with take-off or landing procedures, posing a risk to aircraft. Ground hazards jeopardize the safety of current and future residents and/or workers in the vicinity of an airport. The most obvious ground hazard is a crash, which may produce a serious, immediate risk to those residing in or using areas adjacent to the airport. Most accidents occur during take-off and landing. Therefore, the higher the density around an airport, including transportation facilities, the higher the risk associated with this type of hazard.

Within Placer County, the *Placer County Airport Land Use Compatibility Plan* adopted on February 26, 2014, promotes compatibility between the airports in Placer County and the land uses which surround them. Airports within the County covered under this plan include:

- Auburn Municipal Airport
- Blue Canyon Airport
- Lincoln Regional Airport

This plan does not address Truckee-Tahoe Airport which lies on the boundary between Placer and Nevada counties, where only a small portion lies within Placer County. Airport land use compatibility planning matters for the Truckee-Tahoe Airport are the responsibility of the Truckee-Tahoe Airport Land Use Commission, a special two-county ALUC. The Nevada County Transportation Commission (NCTC) serves as the ALUC staff.

Some of the RTP projects are located within close proximity to airports within the County. These improvements are transportation related and do not create residences, or other habitable structures within proximity to the airport, and they do not conflict with the airport land use plans within Placer County.

Improvements to transportation facilities near airport land uses airport facilities are expected to improve the safety conditions at these airports through increased access and response. The proposed project does not proposed residences. Compliance with the existing regulatory environment would ensure that this impact would be *less than significant*.

Response f): The individual RTP improvement projects would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The RTP would improve transportation systems throughout the County, which is expected to improve the emergency response and evacuation routes throughout the County. Therefore, there is *no impact*.

Response g): The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

Wildfires are a major hazard in the State of California. Wild fires burn natural vegetation on developed and undeveloped lands and include timber, brush, woodland, and grass fires. While low intensity wild fires have a role in the County's ecosystem, wild fires put human health and safety, structures (e.g., homes, schools, businesses, etc.), air quality, recreation areas, water quality, wildlife habitat and ecosystem health, and forest resources at risk.

Placer County has areas with the appropriate fuel loading, and topography for wildfire. When this is combined with the warm and dry summers with temperatures often exceeding 100 degrees Fahrenheit the risk of wildfire increases substantially. Most wildland fires are human caused, so areas with easy human access to land with the appropriate fire parameters generally result in an increased risk of fire.

The individual RTP improvement projects would not result in the construction of structures that would be occupied by humans; therefore, it would not expose people or structures to a significant risk involving wild fires. The RTP provides for improvements to transportation systems throughout the County, which is expected to improve the ability for fire protection services to access areas that have a high wild fire risk rating. Therefore, there is ***no impact***.

X. HYDROLOGY AND WATER QUALITY

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;		X		
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;		X		
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or		X		
(iv) Impede or redirect flood flows?		X		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?		X		

Background

Placer County encompasses approximately 1,503 square miles in central California. Water resources in Placer County are diverse and widespread, and include rivers, streams, sloughs, marshes, wetlands, channels, and underground aquifers. Rivers and streams are plentiful, especially throughout the western (hilly and mountainous) portion of the county. The north and middle forks of the American River, the Rubicon River, and the Folsom Dam, are some of Placer County's most valuable water resources. The northwest portion of Lake Tahoe is also situated within Placer County, although it is not within the PCTPA planning area (the Lake Tahoe basin exists within the TRPA planning area).

Sacramento River Hydrologic Region

Placer County is located primarily in the Sacramento River Hydrologic Region, which covers approximately 17.4 million acres (27,200 square miles) and includes all or large portions of Modoc, Siskiyou, Lassen, Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra, Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa counties. Significant

geographic features include the northern part of the Sacramento-San Joaquin Delta and the Sierra Nevada Range. Small areas of Alpine and Amador counties are also within the region. The Sacramento metropolitan area and surrounding communities form the major population center in the region, which includes approximately 3 million people.

North Lahontan Hydrological Region

The far western portion of Placer County is located in the North Lahontan Hydrological Region, which spans a large portion of the western United States. It includes part of the western edge of the Great Basin, a large landlocked area that covers most of Nevada and northern Utah. The California portion of the North Lahontan Hydrological region includes a large section of the northeast portion of the Sierra Nevada mountain range, which includes a portion of the Lake Tahoe Basin.

Hydrologic Units in Placer County

For purposes of planning on a County-wide basis, hydrologic units are generally considered to be the appropriate watershed planning level. As specific projects within the County are developed, the hydrologic unit level may be too large in terms of a planning scale, and a hydrologic area or hydrologic subarea may be considered more appropriate. The remainder of this section is based on the hydrologic unit level for watershed planning purposes.

Placer County is located within four hydrologic units. These include: the North American Subbasin, the Tahoe West Subbasin (within the Tahoe Valley Groundwater Basin), the Martis Valley Groundwater Basin, and the Olympic Valley Groundwater Basin.

Water Resources

Placer County contains an abundance of water resources. Approximately 700 miles of rivers and streams and 97,000 acres of lakes are within the County. Most water bodies in Placer County originate in the mountainous terrain in the eastern portion of the County.

Lake Tahoe is the largest water body in Placer County. The Tahoe Basin includes all drainages into Lake Tahoe. The Placer County portion of the Lake Tahoe watershed is approximately 43,000 acres. Lake Tahoe is one of the world's highest altitude lakes and contains a significant amount of California's surface water. Most of the waterfront is privately owned and public access is limited, yet the Tahoe Basin seasonally attracts high water-recreation use. However, Lake Tahoe is outside of the PCTPA planning area, under the jurisdiction of the TRPA.

Folsom Lake is the second largest water body in the area. The freshwater lake is formed by Folsom Dam, constructed in 1955 to control the American River. The surface area of the lake is approximately 11,450 acres. The area in and around the Lake is used extensively for recreation activities, including boating, fishing, hiking, and mountain biking.

There are five major rivers that pass-through Placer County, including: the American River (North and Middle Forks), the Rubicon River (running along the southern county line), a portion of the South Yuba River, the Bear River, and the Truckee River. The North Fork of the American River flows southwest and is approximately 88 miles long. It has its headwaters in the Granite Chief area, and has a relatively narrow drainage basin above Folsom Lake. Federal legislation has designated the North Fork of the American River above the Auburn State Recreation Area as a National Wild and Scenic River.

The Middle Fork of the American River drainage basin begins in Picayune Valley and the river forms part of the southern boundary of Placer County. Except for the French Meadows area in the upper part of the basin, public access is limited to trails. The 62-mile-long Middle Fork originates a mere 1.7 miles from the source of the North Fork on the south face of Granite Chief, between the summit and Emigrant Pass.

The Rubicon River flows west for approximately 18 miles, originating in the Five Lakes area at the crest of the Sierra Nevada. Much of the area has limited public access because the area has not been logged previously.

There are several major surface water reservoirs and dams near Placer County, which provide flood control, water storage and recreational opportunities. Smaller reservoirs in the county include French Meadows and Hell Hole Reservoirs, located in the far eastern portion of the county, Rollins Reservoir in the far northern portion of the County, and Camp Far West Reservoir at the western edge of the county.

Streams and creeks are abundant throughout the county, including many that are seasonal. Most of these streams originate in the eastern foothills and are tributaries to one of the major rivers in the area. See Figure 3 for a map of most major water bodies in the county.

In addition to natural rivers and creeks, several man-made aqueducts, channels, and canals are found throughout the county. Wetlands are also found interspersed throughout Placer County. Wetlands in Placer County are typically found at the margins of lakes and streams, in low-lying areas that collect precipitation, and in areas where groundwater intercepts the ground surface. Wetlands in Placer County are of relatively small size.

Flooding

The risk potential or likelihood of a flood event occurring in the county increases with the annual onset of heavy rains from November through March. This is an ongoing concern, and individual projects are designed to ensure flooding risks within the improvement area are minimized to the extent possible.

Much of the historical growth in the County occurred adjacent to streams, resulting in significant damages to property, losses from disruption of community activities, and potential loss of life when the streams overflow. Additional development in the watersheds of these streams affects both the frequency and duration of damaging floods through an increase in stormwater runoff. Other problems connected with stormwater runoff include erosion, sedimentation, degradation of water quality, losses of environmental resources, and certain health hazards.

Placer County encompasses multiple rivers, streams, creeks, and associated watersheds. The County is situated in a region that dramatically drops in elevation from the eastern portion (Sierra Nevada) to the western portion, where excess rain on snow can contribute to downstream flooding. Damaging floods in Placer County occur primarily in the developed areas of the county extending westward from Colfax to Sacramento and Sutter Counties. Flood flows generally follow defined stream channels, drainages, and watersheds. Placer County crosses nine watersheds. The watersheds of Placer County include a combined drainage area of approximately 1,500 square miles.

There are four main watersheds or areas that are the primary source of flooding within the county. These include the following watersheds:

- *Dry Creek Watershed*
- *Cross Canal Watershed*
- *Auburn/Bowman Area*
- *Truckee River Watershed*

Dam Failure: There are six major dams located in and around Placer County, all of which have the potential to inundate portions of the county if they were to fail. These include the Folsom Dam, the L.L. Anderson Dam, North Fork Dam, Lake Tahoe Dam, Lower Hell Hole Dam, and Sugar Pine Dam. One of these dams, the Folsom Dam, is located on the County boundary. The failure of any one of these dams could result from structural instability caused by improper design or construction, instability resulting from seismic shaking, or overtopping and erosion of the dam.

Larger dams that are higher than 25 feet or with storage capacities over 50 acre-feet of water, are regulated by the California Dam Safety Act, which is implemented by the California Department of Water Resources, Division of Safety of Dams (DSD). The DSD is responsible for inspecting and monitoring these dams. The Act also requires that dam owners submit to the California Office of Emergency Services inundation maps for dams that would cause significant loss of life or personal injury as a result of dam failure. The County Office of Emergency Services is responsible for developing and implementing a Dam Failure Plan that designates evacuation plans, the direction of floodwaters, and provides emergency information.

Flood Management: The National Flood Insurance Act of 1968 offers an important incentive to communities for implementing a floodplain management program. In communities which have adopted floodplain management regulations, owners of property located in flood-prone areas may obtain federally subsidized flood insurance. Placer County has adopted such floodplain management regulations.

The boundary of the 100-year floodplain is the basic planning criterion used to distinguish areas where flood hazards justify the establishment of floodplain management regulations. Outside this boundary, the degree of flooding risk is not considered sufficient to justify the imposition of floodplain management regulations, while inside the 100-year floodplain some level of regulation is required to protect public health, safety, and welfare.

Water Quality

Stormwater Runoff: Potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosion of improperly graded construction projects, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures, contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm which produces significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminants in the low flowing stream. Such conditions are most frequent during the fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

Urban storm water runoff was managed as a non-point discharge (a source not readily identifiable) under the Federal Water Pollution Control Amendments of 1972 (PL 92-500, Section 208) until the mid-1980's. However, since then, the Federal Environmental Protection Agency has continued to develop implementing rules which categorize urban runoff as a point source (an identifiable source) subject to National Pollution Discharge Elimination System (NPDES) permits. Rules now affect medium and large urban areas, and further rulemaking is expected as programs are developed to meet requirements of Federal water pollution control laws.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause a buildup of siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

Groundwater Quality: In general, groundwater quality throughout the region is suitable for most urban and agricultural uses, although many have local impairments. Many areas of good quality groundwater exist in the North American Subbasin. In some portions of the basin groundwater quality is marginal. The three major groundwater types are: magnesium calcium bicarbonate or calcium magnesium bicarbonate; magnesium sodium bicarbonate or sodium magnesium bicarbonate; and sodium calcium bicarbonate or calcium sodium bicarbonate. Comparison of groundwater quality data with applicable water quality standards and guidelines for drinking and irrigation indicate elevated levels of TDS/specific conductance, chloride, sodium, bicarbonate, boron, fluoride, nitrate, iron manganese, and arsenic may be of concern in some locations within the subbasin (IRWS, 2015).

Impaired Water Bodies

Section 303(d) of the federal Clean Water Act requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish Water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

There are eighteen Section 303(d) listed impaired water bodies located in Placer County, some of which are within the PCTPA planning area, and some are within the TRPA planning area. The pollutants and TMDLs vary by location. Table 3.9-2 provides a list of the Section 303(d) impaired water bodies in Placer County, with specific notes for those water bodies that are located within the jurisdiction of TRPA.

Table HYDRO-1: Placer County Section 303(d) Impaired Waterbodies

IMPAIRED WATERBODIES
Lake Tahoe (note: located outside of the PCTPA planning area) Water body type: Lake Assessed area: 85,364 acres
Blackwood Creek (note: located outside of the PCTPA planning area) Water body type: River & Stream Assessed area: 6.95 miles
Ward Creek (note: located outside of the PCTPA planning area) Water body type: River & Stream Assessed area: 6.25 miles
Hell Hole Reservoir Water body type: Lake & Reservoir Assessed area: 1,370 acres
Truckee River Water body type: River & Stream Assessed area: 37 miles
Squaw Creek Water body type: River & Stream Assessed area: 2.98 miles
Rollins Reservoir Water body type: Lake & Reservoir Assessed area: 774 acres
Bear River, Upper (from Combie Lake to Camp Far West Reservoir, Nevada and Placer Counties) Water body type: River & Stream Assessed area: 10 miles
American River, North Fork Water body type: River & Stream Assessed area: 17 miles
Lake Combie Water body type: Lake & Reservoir Assessed area: 362 acres
Camp Far West Reservoir Water body type: Lake & Reservoir Assessed area: 1,945 acres
Bear River, Lower (below Camp Far West Reservoir) Water body type: River & Stream Assessed area: 21 miles
Yankee Slough (Placer and Sutter Counties) Water body type: River & Stream Assessed area: 13 miles
Pleasant Grove Creek Water body type: River & Stream Assessed area: 20 miles
Pleasant Grove Creek, South Branch Water body type: River & Stream Assessed area: 7.3 miles
Kaseberg Creek (tributary to Pleasant Grove Creek, Placer County) Water body type: River & Stream Assessed area: 6.4 miles
Curry Creek (Placer and Sutter Counties) Water body type: River & Stream Assessed area: 12 miles
Miners Ravine (Placer County) Water body type: River & Stream Assessed area: 9 miles

SOURCE: CALIFORNIA DEPARTMENT OF WATER RESOURCES

Responses to Checklist Questions

Responses a), e): Construction-Related Water Quality Impacts: Grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

As required by the Clean Water Act, each specific improvement project will require an approved Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices for grading, and preservation of topsoil. A SWPPP is not required if the project will disturb less than one acre. SWPPPs are designed to control storm water quality degradation to the extent practicable using best management practices during and after construction.

The implementing agency will submit the SWPPP with a Notice of Intent to the Regional Water Quality Control Board (RWQCB) to obtain a General Permit. The RWQCB is an agency responsible for reviewing the SWPPP with the Notice of Intent, prior to issuance of a General Permit for the discharge of storm water during construction activities. The RWQCB accepts General Permit applications (with the SWPPP and Notice of Intent) after specific projects have been approved by the lead agency. The lead agency for each specific project that is larger than one acre is required to obtain a General Permit for discharge of storm water during construction activities prior to commencing construction (per the Clean Water Act).

Based upon the general planning nature of the RTP, development of detailed, site-specific information on this impact at this planning level is not feasible. However, each RTP project will include detailed project specific drainage plans that control storm water runoff and erosion, both during and after construction. The Regional Water Quality Control Board will require a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each transportation improvement that disturbs an area one acre or larger. The SWPPPs will include project specific best management measures that are designed to control drainage and erosion. The implementing agency will be required to coordinate the improvements with the Central Valley Flood Project Board, Placer County, and other applicable agencies, and obtain the necessary permits. The implementing agency will also be required to develop projects consistent with all relevant water control plans and groundwater management plans. Implementation of the following mitigation measures would ensure that the RTP would have a ***less than significant*** impact from these issues.

Mitigation Measures

Mitigation Measure HYDRO-1: *Comply with NPDES General Construction Permit requirements. To reduce or eliminate construction-related water quality effects, the implementing agency shall ensure that transportation improvement projects comply with the requirements of the NPDES General Construction Permit. Project implementation agencies are required to obtain coverage under the General Construction Permit before the onset of any construction activities, where the disturbed area is 1 acre or greater in size.*

A SWPPP shall be developed by a qualified engineer or erosion control specialist in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be implemented prior to the issuance of any grading permit before construction. The SWPPP shall be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.

Compliance and coverage under the NPDES General Construction Permit will require controls of pollutant discharges that utilize BMPs and technology to reduce erosion and sediments to meet

water quality standards. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the construction site. Measures may include, temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.

Final selection of BMPs will be subject to approval by the implementing agency. The implementing agency will verify that an NOI has been filed with the SWRCB, and a SWPPP has been developed before allowing construction to begin.

Mitigation Measure HYDRO-2: Implement a Spill Prevention and Control Program. As part of requiring compliance with the NPDES General Construction Permit, the implementing agency and its agents shall develop and implement a spill prevention and control program to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during all construction activities. The program shall be completed before any construction activities begin.

Mitigation Measure HYDRO-3: Implement measures to maintain water quality after construction. The project implementing agencies shall implement source and treatment control measures according to the Placer County Stormwater Quality Program. General site design control measures are required to minimize the volume and rate of stormwater runoff discharge from the project site. General site design control measures incorporated into the project design can include:

- conserving natural areas;
- protecting slopes and channels;
- minimizing impervious areas;
- storm drain identification, and appropriate messaging and signing; and
- minimizing effective imperviousness through the use of turf buffers and/or grass-lined channels, if feasible.

In addition, projects must include treatment control measures, if possible and when feasible, to remove pollutants from stormwater runoff prior to discharge to the storm drain system or receiving water. Treatment control measures may include, but not be limited to, the following:

- Vegetated buffer strip
- Vegetated swale
- Extended detention basin
- Wet pond
- Constructed wetland
- Detention basin/sand filter
- Porous pavement detention
- Porous landscape detention
- Infiltration basin
- Infiltration trench
- Media filter
- Retention/irrigation
- Proprietary control device

Selection and implementation of these measures shall be based on a project-by-project basis, depending on project size and stormwater treatment needs.

Dewatering Water Quality Impacts: Some RTP projects, such as overpasses, underpasses, grade separations, highway interchanges, and other rail crossing structures could require excavation below the ground surface or support structures or foundations secured deep into the ground. Projects that excavate or secure foundations deep in the ground may encounter groundwater. Depending on the location, trenching and excavation associated with these projects may reach depths that can expose the water table and create a direct path to the groundwater basin for contaminants to enter the groundwater system. Primary construction-related contaminants that could reach groundwater would include oil and grease, and construction-related hazardous materials and dewatering effluent.

Based upon the general planning nature of the RTP, development of detailed, site-specific information on this impact at this planning level is not feasible. However, each transportation RTP project will include detailed project specific geotechnical engineering that would identify the groundwater levels and the need for dewatering. If dewatering was deemed necessary after the appropriate engineering study then the implementing agency would obtain a Dewatering Permit from the Regional Water Quality Control Board and comply with provisions for dewatering. The implementing agency would also need to obtain an NPDES permit and Waste Discharge Requirement before discharging any dewatered effluent to surface water. Implementation of the following mitigation measure would ensure that the RTP would have a **less than significant** impact from these issues.

Mitigation Measures

Mitigation Measure HYDRO-4: *Comply with provisions for dewatering. Before discharging any dewatered effluent to surface water, the implementing agency will obtain an NPDES permit and Waste Discharge Requirement from the Central Valley RWQCB and/or the Lahontan RWQCB, as appropriate. Depending on the volume and characteristics of the discharge, coverage under the NPDES General Construction Permit may be permissible. If coverage under the General Construction Permit is not allowed, the project will conform to requirements of the General Dewatering Permit, issued by the RWQCB and/or other applicable agencies. The project implementation agencies will design and implement measures as necessary so that the discharge limits identified in the relevant permit are met.*

Response b): Individual RTP projects, such as road widenings, interchange reconstruction, railway crossings, and other projects would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potentials; and impervious surfaces such as pavement significantly reduce infiltration capacity and increase surface water runoff. The amount of new pavement and the extent to which it affects infiltration depends on the site-specific soil type. Projects located in urban areas would have less of an impact than projects converting open lands and spaces.

Based upon the general planning nature of the RTP, development of detailed, site-specific information on this impact at the program level is not feasible. However, many of the individual RTP projects are located in urban areas and along existing highways, streets, and roads in which most of the surfaces are already paved or impervious. In addition, extensive storm drainage systems present in these areas currently intercept rainfall and runoff waters, thus limiting the amount of groundwater recharge that occurs. Each project will include detailed project specific drainage plans that control storm water runoff, both during and after construction. The drainage plan will include project specific best management measures that are designed to allow for

natural recharge and infiltration of stormwater. Implementation of the RTP would have a **less than significant** impact from these issues.

Response c.i-iv): Individual RTP projects would create new impervious surfaces. This would result in an incremental reduction in the amount of natural soil surfaces available for infiltration of rainfall and runoff, potentially generating additional runoff during storm events. In addition, the increase in impervious surfaces, along with the increase in surface water runoff, could increase the non-point source discharge of pollutants. Anticipated runoff contaminants include sediment, pesticides, oil and grease, nutrients, metals, bacteria, and trash. Contributions of these contaminants to stormwater and non-stormwater runoff would degrade the quality of receiving waters. During the dry season, vehicles and other urban activities release contaminants onto the impervious surfaces, where they can accumulate until the first storm event. During this initial storm event, or first flush, the concentrated pollutants would be transported via runoff to stormwater drainage systems. Contaminated runoff waters could flow into the stormwater drainage systems that discharge into rivers, agricultural ditches, sloughs, and channels and ultimately could degrade the water quality of any of these water bodies.

Additionally, some of the RTP projects could potentially alter surface drainage patterns as a result of directly altering flow patterns, or placing structures in a floodway, all of which could yield increased amounts of stormwater runoff and/or redirect flood flows. The construction activities associated with RTP projects, such as road widening, interchange reconstruction, railway crossings, and other projects that convert permeable surfaces or install permanent structures would require stormwater drainage management measures to avoid flooding impacts. The existing storm drainage network in Placer County may not have sufficient capacity to convey the additional runoff from the individual RTP projects. If the storm drainage network is not appropriately designed it could be overwhelmed during a large storm event and result in flooding.

Based upon the general planning nature of the RTP, development of detailed, site-specific information on this impact at the program level is not feasible. As previously discussed, the implementing agency would also be required to obtain permits from the Army Corps of Engineers and the Department of Fish and Wildlife if any work is performed within a waterway. Each RTP project will also include detailed project specific floodplain and drainage studies that assess the drainage characteristics and flood risks so that an appropriate storm drainage plan can be prepared to control storm water runoff, both during and after construction. The drainage plan will ultimately include project specific best management measures that are designed to allow for natural recharge and infiltration of stormwater. Implementation of the following mitigation measures would ensure that the RTP would have a **less than significant** impact from these issues.

Mitigation Measures

Mitigation Measure HYDRO-5: *Conduct project-level drainage studies. As part of the infrastructure plan, the project implementing agencies and/or their contractors will conduct a drainage study. This study will address the following topics:*

- *A calculation of pre-development runoff conditions and post-development runoff scenarios using appropriate engineering methods. This analysis will evaluate potential changes to runoff through specific design criteria, and account for increased surface runoff.*

- *An assessment of existing drainage facilities within the project area, and an inventory of necessary upgrades, replacements, redesigns, and/or rehabilitation, including the sizing of on-site stormwater detention features and pump stations.*
- *A description of the proposed maintenance program for the onsite drainage system.*
- *Standards for drainage systems to be installed on a project/parcel-specific basis.*
- *Proposed design measures to ensure structures are not located within 100-year floodplain areas.*

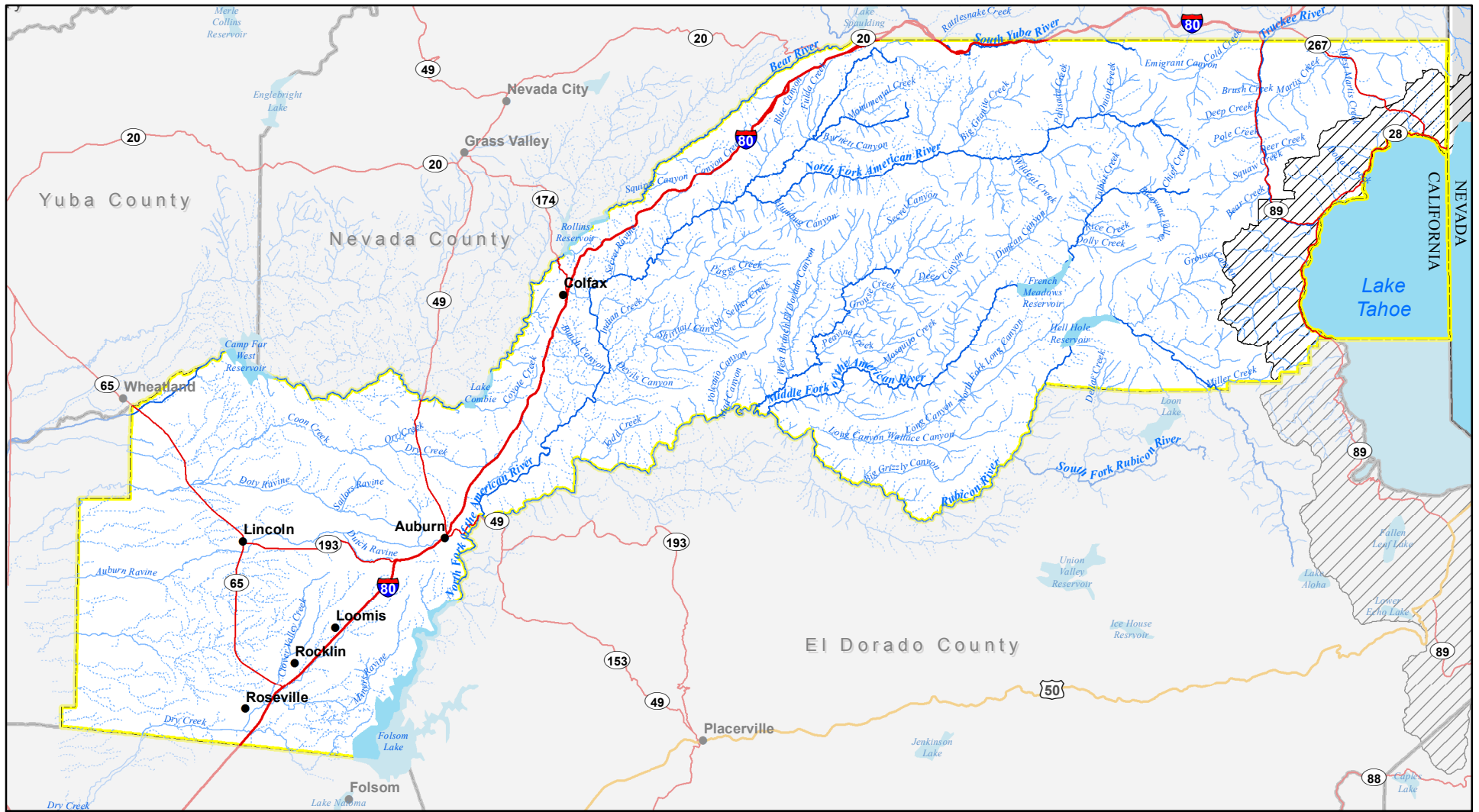
Drainage systems shall be designed in accordance with the County's, Flood Control Agency's, and other applicable flood control design criteria. As a performance standard, measures to be implemented from those studies will provide for no net increase in peak stormwater discharge relative to current conditions, ensure that 100-year flooding and its potential impacts are maintained at or below current levels, and that people and structures are not exposed to additional flood risk.

Mitigation Measure HYDRO-6: *Avoid restriction of flood flows. Proposed projects requiring federal approval or funding shall comply with Executive Order 11988 for floodplain management. Projects shall avoid incompatible floodplain development designs, they will restore and preserve the natural and beneficial floodplain values, and they will maintain consistency with the standards and criteria of the National Flood Insurance Program. In addition, a Letter of Map Revision (LOMR) shall be prepared and submitted to FEMA where unavoidable construction would occur within 100-year floodplains. The LOMR shall include revised local base flood elevations for projects constructed within flood prone areas. Potential impacts due to flooding as a result of RTP projects are assumed to be alleviated through the FEMA LOMR approval process.*

Mitigation Measure HYDRO-7: *Avoid project dewatering. Project designs that require continual de-watering activities for the life of the projects shall be avoided if possible. Due to the potential for flooding and destabilizing conditions, project implementation agencies will choose project designs that do not require continual dewatering, if suitable project alternatives exist. Project alternatives may include construction of overpasses, as opposed to below-grade underpasses, which would avoid interception with groundwater.*

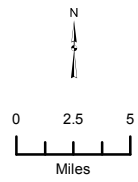
Response d): The proposed project is not located in a tsunami zone. However, the potential for flood hazards and seiches exist within the planning area. Flood hazards and seiches could generate a potential hazard when they cause a levee or dam to fail. While it would be difficult to determine when and where levees or dams may fail, inundation of buildings and structures and personal injury or death could result. The proposed projects may create structures or obstructions to flood flows from levee or dam failures. However, RTP projects constructed within areas subject to flooding due to dam failure, as mapped by the California and Placer County Offices of Emergency Services, would be built following standard building codes and federal, state, and local regulations; all of which would be adequate to protect against further personal injury or death. Additionally, while construction of individual RTP projects has the potential to release pollutants into the environment, they would be required to comply with all existing regulations and policies. Implementation of the RTP would have a **less than significant** impact from this issue.

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Legend

- Tahoe Regional Planning Agency Jurisdiction
- River - Perennial
- County Boundary
- Stream - Perennial
- Placer County
- Stream - Intermittent



2040 PLACER COUNTY RTP
Figure 3: Hydrography Map

Data sources: California Spatial Information Library. Placer County GIS. Map date: May 29, 2019

XI. LAND USE AND PLANNING

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Physically divide an established community?	X			
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	X			

Responses to Checklist Questions

Responses a), b): It has been determined that the potential impacts on land use and planning caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the two environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact on land use and planning. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the environmental impact report.

XII. MINERAL RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

Background

The State Mining and Geology Board (SMGB) prioritizes areas to be classified as containing significant mineral resources and areas to be designated as containing mineral deposits of regional or statewide significance. Mineral Resource Zone (MRZ) categories are used to identify areas identified, undetermined, and unknown mineral resource significance. An MRZ has been established in the southwestern part of the county. Within the MRZ, significant deposits of aggregate have been identified south of Rocklin and significant deposits of gold have been identified near Auburn, Ophir, and Gold Hill.

The U.S. Geological Survey Mineral Resource Data System (MRDS) describes metallic and nonmetallic mineral resources throughout the world and identifies the deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. MRDS data indicates hundreds of records of known mineral resources in Placer County. The majority of resources are historic records. Portions of Placer County, including in the foothills and mountainous areas of the county, were historically renowned for gold deposits. In addition, the primary resources identified include sand and gravel, chromium, clay, stone, silver, and pyrite.

Responses to Checklist Questions

Responses a), b): An extensive range of mineral resources are found throughout Placer County. Current mineral extraction operations in the county include sand and gravel, clay, stone, and gold. Sand and gravel is used to make various aggregate products necessary for development and maintenance of the urban environment. Revenue generated from sand and gravel is estimated to be several times higher than other minerals mined in the county.

Some individual RTP improvements may be located in the vicinity of land that contains mineral resources. Implementation of the improvements would not directly cause changes resulting in conversion of any mining operations into a different use. Additionally, the individual improvement projects will improve transportation systems in the County, which would provide a beneficial impact for mining operations. Implementation of the proposed project will have a **less than significant** impact on mineral resources.

XIII. NOISE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?		X		
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	

Background

The principal sources of noise in Placer County come from both stationary and mobile sources. Noise sources are classified as mobile sources if they are associated with vehicular traffic, railroad trains, airplanes, and other forms of transportation. Stationary sources refer to noise generated by stationary activities, equipment or site-specific uses.

The major source of mobile noise comes from vehicle traffic on major roadways. Freeways and highways with the largest traffic volumes generate the highest noise levels in the area. Truck routes in particular generate high traffic noise. Other mobile noise sources include train activity on the Union Pacific/Amtrak railroad that run through the County, and aircraft operations at several public and private airports and airstrips in the area, as well as flyovers throughout most of the agricultural areas for crop dusting.

*Responses to Checklist Questions***Response a):**

General Construction Activities: The proposed RTP does not directly cause a noise impact, although it could indirectly have noise impacts as a result of development and operation of subsequent RTP projects during both the short and long-term. A majority of the proposed improvements identified in the RTP, with the exception of changes in transit operations, transportation demand management, and regional planning, would require some level of construction. Larger construction-related projects, such as interchange improvements, bridge improvements, and road realignment and widening projects, would be of particular concern given the noise and ground-borne vibration generation potential of these projects.

Noise levels typically associated with roadway construction equipment and distances to predicted noise contours are summarized in Table NOISE-1.

Table NOISE-1: Construction Equipment Noise Levels

EQUIPMENT	TYPICAL NOISE LEVEL (dBA) 50 FEET FROM SOURCE		DISTANCE TO NOISE CONTOURS (FEET, dBA L_{EQ})		
	L_{MAX}	L_{EQ}	70 dBA	65 dBA	60 dBA
Air Compressor	80	76	105	187	334
Auger/Rock Drill	85	78	133	236	420
Backhoe/Front End Loader	80	76	105	187	334
Blasting	94	74	83	149	265
Boring Hydraulic Jack/Power Unit	80	77	118	210	374
Compactor (Ground)	80	73	74	133	236
Concrete Batch Plant	83	75	94	167	297
Concrete Mixer Truck	85	81	187	334	594
Concrete Mixer (Vibratory)	80	73	74	133	236
Concrete Pump Truck	82	75	94	167	297
Concrete Saw	90	83	236	420	748
Crane	85	77	118	210	374
Dozer/Grader/Excavator/Scraper	85	81	187	334	594
Drill Rig Truck	84	77	118	210	374
Generator	82	79	149	265	472
Gradall	85	81	187	334	594
Hydraulic Break Ram	90	80	167	297	529
Jack Hammer	85	78	133	236	420
Impact Hammer/Hoe Ram (Mounted)	90	83	236	420	748
Pavement Scarifier/Roller	85	78	133	236	420
Paver	85	82	210	374	667
Pile Driver (Impact/Vibratory)	95	88	420	748	1,330
Pneumatic Tools	85	82	210	374	667
Pumps	77	74	83	149	265
Truck (Dump/Flat Bed)	84	80	167	297	529

SOURCES: FHWA 2006

As indicated, maximum intermittent noise levels associated with construction equipment typically range from approximately 77 to 95 dBA L_{max} at 50 feet. Pile driving and demolition activities involving the use of pavement breakers and jackhammers, and are among the noisiest of activities associated with transportation improvement and construction projects. Depending on equipment usage and duration, average-hourly noise levels at this same distance typically range from approximately 73 to 88 dBA L_{eq} . Distances to predicted noise contours would, likewise, vary depending on the specific activities conducted and equipment usage. Delivery vehicles, construction employee vehicle trips, and haul truck trips may also contribute to overall construction noise levels.

Increases in ambient noise levels associated with construction projects located near sensitive land uses can result in increased levels of annoyance, as well as potential violation of local noise standards. Construction activities occurring during the more noise-sensitive nighttime hours would be of particular concern, given the potential for increased sleep disruption. Impacts to sensitive receptors resulting from proposed transportation improvement and construction projects would depend on several factors, such as the equipment used, surrounding land uses, shielding provided by intervening structures and terrain, and duration of construction activities.

The following mitigation measure would limit construction to the daytime hours, to the extent feasible, and would require equipment to be properly maintained and muffled. Furthermore, this mitigation measure provides resident notification requirements, and measures to resolve noise

complaints. Implementation of Mitigation Measure NOISE-1 would reduce this impact to a ***less than significant*** level.

Rail: Placer County contains a major railroad, the Amtrak/Union Pacific Railroad. As a result, train noise from freight cars, crossings, and whistles generate noise throughout the county.

The potential for more trips on the existing rail lines is not anticipated to result in substantial and permanent noise increases at sensitive receptors since the noise from additional trains would be sporadic events; the rail lines predate most of the existing development, and the County and the cities have accounted for the existence of these tracks in their land use planning, including planning for development with uses that are not noise-sensitive at these locations. Nonetheless, the anticipated rapid population increase in Placer County may result in a greater number of sensitive receptors located in some areas near existing rail lines.

Mitigation Measure NOISE-1 would require a project-level noise evaluation for each RTP project that is located near a sensitive receptor. The noise evaluation would identify areas that would have elevated noise levels as a result of the project and require measures to attenuate the noise to an acceptable level. Such measures could include constructing earth berms, sound walls, establishing buffers, or improving acoustical insulation in residential units. Implementation of Mitigation Measure NOISE-1 would reduce this impact to a ***less than significant*** level.

Operational Traffic: The 2040 RTP does not directly cause a noise impact, although it could indirectly have noise impacts as a result of development and operation of subsequent RTP projects during both the short and long-term. While many of these projects will likely have no effect on the operational noise generation of the facility, some improvement projects, which involve new facilities or capacity enhancements for existing facilities, could affect noise-sensitive land uses. Noise-sensitive land uses could be exposed to noise in excess of normally acceptable noise levels or increases in noise as a result of the operation of expanded or new transportation facilities (i.e., increased traffic resulting from roadway capacity improvements, new transit facilities, etc.).

Placer County and incorporated communities have adopted Noise Elements of their General Plans that establish noise-related policies that, when implemented, protect sensitive receptors from significant noise. The policies that are laid out in the Noise Element(s) are consistent with federal and state regulations designed to protect noise sensitive receptors. During the design process, the implementing agency would be responsible for ensuring that the project is designed consistent with adopted policies and state and federal regulations. Although the policy and regulatory controls for noise-related impacts are in place in the planning area, subsequent improvement projects would result in an increase in traffic noise levels. For most projects, consistency with the adopted policies and established regulations would help to reduce exposure of sensitive receptors to transportation noise levels. In addition, the following mitigation measure would require a project-level noise evaluation for each RTP project that is located near a sensitive receptor. The noise evaluation would identify areas that would have elevated noise levels as a result of the project and require measures to attenuate the noise to an acceptable level. Such measures could include constructing earth berms, sound walls, establishing buffers, or improving acoustical insulation in residential units. Implementation of this mitigation measure would reduce this impact to a ***less than significant*** level.

Mitigation Measure

Mitigation Measures NOISE-1: Prior to approval of RTP projects, the implementing agency shall perform a project-level noise evaluation. For projects adjacent to noise-sensitive uses, implementing agencies shall consider the following measures:

- Construct vegetative earth berms with mature trees and landscaping to attenuate roadway noise on adjacent residences or other sensitive use, and /or sound walls or other similar sound-attenuating buffers, as appropriate.
- Properly zone, buffer, and restrict development to ensure that future development is compatible with transportation facilities.
- Design projects to maximize the distance between noise-sensitive land uses and new roadway lanes, roadways, rail lines, transit centers, park-and-ride lots, and other new noise generating facilities.
- Improve the acoustical insulation of residential units where setbacks and sound barriers do not sufficiently reduce noise.

Response b): Ground-borne vibration and noise levels associated with highway traffic is typically considered to pose no threat to buildings and potential annoyance to people would be minimal. Traffic vibration levels are typically highest associated with truck passbys. Automobile traffic normally generates vibration peaks of one-fifth to one-tenth that of trucks. Based on measurements conducted by Caltrans, even the highest truck generated vibrations, which were measured at approximately 16 feet from the centerline of the near travel-lane, were not found to exceed 0.08 in/sec. This level coincides with the maximum recommended “safe level” for ruins and historical structures.

Construction activities would, however, require the use of off-road equipment which could adversely affect nearby land uses. The highest ground-borne vibration levels would be generated by the use of pile drivers and vibratory rollers. Ground-borne vibration levels associated with proposed construction improvement projects could potentially exceed recommended criteria for structural damage and/or human annoyance (0.2 and 0.1 in/sec ppv, respectively) at nearby existing land uses. As a result, exposure to construction-generated ground-borne vibration levels would be considered **potentially significant**.

Mitigation Measure NOISE-2 would limit construction to the daytime hours, to the extent feasible, and would require use of equipment with reduced equipment noise/vibration levels, to the extent practical. The level of mitigation would be project and site specific and would include measures normally required by Caltrans, as well as requirements under the General Plan Noise Elements and Noise Ordinances of the applicable jurisdictions. Implementation of the following mitigation measure would reduce this impact to a **less than significant** level.

Mitigation Measure

Mitigation Measure NOISE-2: Subsequent projects under the RTP shall be designed and implemented to reduce adverse construction noise and vibration impacts to sensitive receptors, as feasible. Measures to reduce noise and vibration effects may include, but are not limited to:

- Limit noise-generating construction activities to the least noise-sensitive daytime hours, which is generally 6am to 9pm.
- Construction of temporary sound barriers to shield noise-sensitive land uses.

- *Location of noise-generating stationary equipment (e.g., power generators, compressors, etc.) at the furthest practical distance from nearby noise-sensitive land uses.*
- *Phase demolition, earth-moving and ground-impacting operations so as not to occur in the same time period.*
- *Use of equipment noise-reduction devices (e.g., mufflers, intake silencers, and engine shrouds) in accordance with manufacturers' recommendations.*
- *Substituting noise/vibration-generating equipment with equipment or procedures that would generate lower levels of noise/vibration. For instance, in comparison to impact piles, drilled piles or the use of a sonic or vibratory pile driver are preferred alternatives where geological conditions would permit their use.*
- *Other specific measures as they are deemed appropriate by the implementing agency to maintain consistency with adopted policies and regulations regarding noise.*
- *Comply with all local noise control and noise rules, regulations, and ordinances.*

Response c): Some of the RTP projects are located within close proximity to airports within the County. These improvements are transportation related and do not create residences, or other habitable structures within proximity to the airport, and they do not conflict with the airport land use plans within Placer County. The proposed project would not expose people residing or working in the project area to excessive noise levels. This is a ***less than significant*** impact.

XIV. POPULATION AND HOUSING

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	X			
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	X			

Responses to Checklist Questions

Responses a), b): It has been determined that the potential impacts on population and housing caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the two environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact on population and housing. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the environmental impact report.

XV. PUBLIC SERVICES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

Responses to Checklist Questions

Response a): The proposed project will not directly result in an increased need for any public services or facilities and would not result in any new significant adverse impacts beyond those addressed in the 2036 RTP EIR (PCTPA, 2016a) or the 2036 RTP EIR (PCTPA, 2016b). The individual improvement projects are not anticipated to generate a need for additional public services; however, each will be evaluated when they are designed/engineered. With standard best management practices by the local land use authority and service providers all potential impacts associated with individual improvement projects would be reduced. Implementation of the proposed project itself would have a *less than significant* impact relative to this issue and this topic will not be addressed further in the EIR.

XVI. RECREATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Responses to Checklist Questions

Responses a), b): The proposed project itself will not directly result in an increased need for any recreational facilities and would not result in any new significant adverse impacts beyond those addressed in the 2036 RTP EIR (PCTPA, 2016a) or the 2036 RTP EIR (PCTPA, 2016b). The individual improvement projects are not anticipated to generate a need for additional recreation; however, each will be evaluated when they are designed/engineered. With standard best management practices by the local land use authority and recreational providers all potential impacts associated with individual improvement projects would be reduced. Implementation of the proposed project itself would have a *less than significant* impact relative to this issue and this topic will not be addressed further in the EIR.

XVII. TRANSPORTATION

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	X			
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	X			
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	X			
d) Result in inadequate emergency access?	X			

Responses to Checklist Questions

Responses a), b), c), d): Based on existing and projected traffic volume levels along roadways, it has been determined that the potential transportation impacts caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the four environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact from transportation. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the environmental impact report.

XVIII. TRIBAL CULTURAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	X			
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.	X			

Responses to Checklist Questions

Responses ai-ii): It has been determined that the potential impacts on tribal cultural resources caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each of the two environmental issues listed in the checklist above in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact on tribal cultural resources. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the environmental impact report.

XIX. UTILITIES AND SERVICE SYSTEMS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?		X		
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?		X		
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?		X		
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?		X		
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?		X		

Responses to Checklist Questions

Response a): The provision of public services and the construction of onsite and offsite infrastructure improvements may be required to accommodate the development of the proposed RTP. Landscaping that is installed along roadways may require regular application of potable or reclaimed water. Some transit-related projects would involve the construction of transit stations. These transit stations would require small amounts of potable water for restrooms, public drinking water, and landscaping. Additionally, the increased use of transit methods of transportation, such as buses and trains, would involve a minimal increase in the demand for potable water.

Project site specific design is not currently available for RTP improvement projects. Therefore, the location of collection and conveyance infrastructure is yet to be determined. Therefore, the increased demand for water would be evaluated on a project by project basis as part of the CEQA process prior to project approval.

The proposed RTP is not anticipated to require the construction of new water treatment facilities or expansion of existing water treatment facilities for water service. However, because site specific design details are not currently available, Mitigation Measure UTILITIES-1 requires project specific review by the implementing agency prior to project approval. Implementation of Mitigation Measure UTILITIES-1 would reduce this potentially significant impact to a ***less than significant*** level.

Separately, transportation projects included in the 2040 RTP are not anticipated to require significant additional wastewater service. The improvement of and increased usage of non-motorized transportation methods, like bike routes, are not anticipated to require additional levels of wastewater service. If restrooms are incorporated into non-motorized transportation projects, these uses would also require minimal amounts of wastewater services (for toilets, water fountains, and faucets).

The total projected demand for each of these types of projects is not anticipated to be significant but will need to be analyzed on a project by project level. Some RTP projects may require new wastewater collection and conveyance infrastructure needed for the proposed project will require trenching/excavation of earth, and placement of pipe within the trenches at specific locations, elevations, and gradients. Project site specific design is not currently available for future RTP improvement projects; therefore, the location of collection and conveyance infrastructure is yet to be determined. Therefore, this is considered a potentially significant impact.

Mitigation Measure UTILITIES-2 requires project level review for transportation projects that require additional wastewater infrastructure upgrades by the implementing agency, which includes the development of applicable mitigation measure that are project specific. Implementation of Mitigation Measure UTILITIES-2 would reduce this potentially significant impact relating to the installation of the wastewater collection and conveyance system infrastructure to a ***less than significant*** level.

Onsite storm drainage would be installed to serve individual RTP improvements throughout the plan area. Most transportation improvements will be on or adjacent to existing transportation facilities. The addition of new impervious surfaces may require additional on-site project drainage and result in additional stormwater flow volumes. Drainage systems are designed on a site-specific basis and project level design criteria are not known at this time.

Because the project site could increase runoff, project impacts to stormwater are considered potentially significant. The following mitigation measure requires the implementing agency to design and install a drainage system that meets performance standards subject to implementing agencies and/or Caltrans review and approval. With the implementation of Mitigation Measure UTILITIES-3, drainage impacts would be reduced to a ***less than significant*** level.

Lastly, transportation projects included in the 2040 RTP may include new new electric power, natural gas, or telecommunications facilities infrastructure. Implementation of Mitigation Measure UTILITIES-4 would reduce this potentially significant impact relating to the installation of the electric power, natural gas, and/or telecommunications infrastructure to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure UTILITIES-1: *The implementing agencies and/or Caltrans shall be required to provide CEQA review for all projects that may require additional water treatment upgrades. Projects shall be analyzed on a case by case basis to determine if construction or expansion of water treatment facilities, and or infrastructure upgrades of existing and new facilities would cause significant environmental effects.*

Mitigation Measure UTILITIES-2: *The implementing agencies and/or Caltrans shall be required to provide CEQA review for all projects that require additional wastewater infrastructure upgrades. Projects shall be analyzed on a case by case basis to determine if construction or expansion of*

wastewater treatment and collection facilities, and or infrastructure upgrades of existing and new facilities would cause significant environmental effects. Implementing agencies shall determine appropriate mitigation measures that are project specific.

Mitigation Measure UTILITIES-3: *The implementing agencies and/or Caltrans shall require projects to direct stormwater run-off and other surface drainage into an adequate on-site system or into a municipal system with capacity to accept the project drainage. This should be demonstrated by requiring consistency with local stormwater drainage master plans, and include a project-specific drainage analysis satisfactory to the jurisdiction's engineer.*

Mitigation Measure UTILITIES-4: *The implementing agencies and/or Caltrans shall be required to provide CEQA review for all projects that require electric power, natural gas, and/or telecommunications infrastructure upgrades. Projects shall be analyzed on a case by case basis to determine if construction or expansion of electric power, natural gas, and/or telecommunications infrastructure facilities, and or infrastructure upgrades of existing and new facilities would cause significant environmental effects. Implementing agencies shall determine appropriate mitigation measures that are project specific.*

Response b): Transportation projects included in the 2040 RTP are not anticipated to require significant additional potable water service. The improvement of and increased usage of non-motorized transportation methods, like bike routes, are not anticipated to require additional levels of potable water service, other than drinking fountains. If restrooms are incorporated into non-motorized transportation projects, these uses would also require minimal amounts of potable water (for faucets, drinking fountains, and landscaping) services.

Landscaping that is installed along roadways may require regular application of potable or reclaimed water. Some transit-related projects would involve the construction of transit stations. These transit stations would require small amounts of potable water for restrooms, public drinking water, and landscaping. Additionally, the increased use of transit methods of transportation, such as buses and trains, would involve a minimal increase in the demand for potable water.

Project site specific design is not currently available for RTP improvement projects, therefore, the amount of Potable water required to serve individual projects is not determined. Therefore, the increased demand for water would need to be evaluated on a project by project basis as part of the CEQA process prior to project approval.

The following mitigation measure requires project specific review by the implementing agency prior to project approval to ensure adequate water supplies are available to serve the proposed project and existing commitments. With implementation of the following mitigation measure any potentially significant impacts related to water supply and availability would be reduced to a **less than significant** level.

MITIGATION MEASURE

Mitigation Measure UTILITIES-5: *Prior to construction of facilities that would require water service for potable consumption and landscaping purposes, the implementing agency shall secure adequate water supplies to serve the proposed project and undertake project-level review as necessary to provide CEQA compliance. Wherever feasible, facilities shall implement water conservation practices including but not limited to: the use of reclaimed water instead of potable water for landscaping purposes, low flow fixtures, and water efficient landscape design.*

Response c): Transportation projects included in the 2040 RTP are not anticipated to require significant additional wastewater service. The improvement of and increased usage of non-motorized transportation methods, like bike routes, are not anticipated to require additional levels of wastewater service. If restrooms are incorporated into non-motorized transportation projects, these uses would also require minimal amounts of wastewater services (for toilets, water fountains, and faucets).

The total projected demand for each of these types of projects is not anticipated to be significant but will need to be analyzed on a project by project level. With incorporation of the following mitigation measure, implementing agencies would be required to be analyzed on a case by case basis to determine if additional project demand would impact wastewater treatment and collection capacity. Implementation of the following mitigation measure would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments. Implementation of this mitigation measure would reduce this potential impact to a **less than significant** level.

MITIGATION MEASURE

Mitigation Measure UTILITIES-6: *Prior to construction of facilities that would require wastewater treatment services, the implementing agency shall secure adequate wastewater treatment capacity and undertake project-level review as necessary to provide CEQA compliance.*

Responses d), e): Individual RTP projects have the potential to generate a significant quantity of solid waste during construction through demolition, grading, and excavation activities. The Placer County General Plan, as well as most of the city general plans, contains policies to encourage the maximum use of solid waste reduction and recycling, which would include the reuse of asphalt, concrete, aggregate and other road construction materials demolished as a part of a road improvement project. Materials that are not reused would be transported to the nearest landfill and disposed of appropriately.

During operation individual RTP projects are not anticipated to generate significant volumes of solid waste. Several transportation enhancement projects including alternative transit improvements would generate minimal amounts of solid waste including improvements that require restrooms and other areas that would incorporate trash receptacles.

As discussed previously, individual project level design is not known at this time, and individual RTP projects solid waste generation is unknown. Roadway and other transportation improvement projects have the potential to generate significant volumes of solid waste during construction activities. Therefore, this is considered a potentially significant impact.

The following mitigation measure requires project specific review by the implementing agency prior to project approval to ensure receiving landfills have adequate solid waste capacity to serve individual improvement projects. Additionally, this mitigation measure encourages the recycling and reuse of construction materials to reduce solid waste generated by construction and operational activities. With implementation of the following mitigation measure, potentially significant impacts related to solid waste would be reduced to a **less than significant** level.

MITIGATION MEASURE

Mitigation Measure UTILITIES-7: *Prior to construction of transportation improvements and facilities that generate solid waste or require solid waste services; the implementing agency shall*

ensure receiving landfills have adequate solid waste capacity to serve additional project waste volumes. Additionally, the implementing agency shall:

- *Require the construction contractor to work with the County Recycling Coordinator to ensure that source reduction techniques and recycling measures are incorporated into project construction.*
- *Require the amount of solid waste generated during construction to be estimated prior to construction, and appropriate disposal sites will be identified and utilized.*

For individual projects that include facilities that produce ongoing waste streams (including trash receptacles) the implementing agency shall, where feasible:

- *Require waste reduction strategies including but not limited to: convenient recycling stations (onsite recycling receptacles) at all solid waste collection (trash receptacle) locations. Waste reduction strategies shall be coordinated with the County Recycling Coordinator.*

XX. WILDFIRE

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?		X		
d) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?		X		
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?		X		
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?		X		

Responses to Checklist Questions

Responses a), b), c), d): The proposed project is a regional planning effort developed by the PCTPA that covers all of Placer County, except for Placer County area within the Lake Tahoe Basin. The planning area includes “Very High” Fire Hazard Severity Zones within the State Responsibility Area (SRA), as determined by CAL FIRE. The individual improvements projects would not result in new structures in these areas, but would improve connectivity within the planning area, thereby allowing improved management or wildfires within the planning area. Therefore, the proposed project would not impair an adopted emergency response plan or emergency evacuation plan, exacerbate wildfire risks, or expose people or structures to significant wildfire risks.

Nevertheless, there exists the possibility that proposed project could require the installation or maintenance of infrastructure associated with the proposed project that could exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Therefore, the potential for individual projects to exacerbate fire risk or result in temporary or ongoing environmental impacts due to the installation or maintenance of associated infrastructure will need to be analyzed on a project by project level.

Project site specific design is not currently available for RTP improvement projects; therefore, the location of associated infrastructure is yet to be determined. Therefore, installation or maintenance of associated infrastructure would be evaluated on a project by project basis as part of the CEQA process prior to project approval. Since site specific design details are not currently available, Mitigation Measure WILDFIRE-1 requires project specific review by the implementing agency prior to project approval. Implementation of Mitigation Measure WILDFIRE-1 would reduce this potentially significant impact to a *less than significant* level.

MITIGATION MEASURES

Mitigation Measure WILDFIRE-1: *The implementing agencies shall be required to provide CEQA review for all projects that may require the installation or maintenance of infrastructure that could exacerbate fire risk or that could result in temporary or ongoing environmental impacts. Projects shall be analyzed on a case by case basis to determine if installation or maintenance of such infrastructure would cause significant environmental effects.*

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	X			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X			

Responses to Checklist Questions

Responses a), b), c): As described throughout the analysis above, the proposed project will not result in any changes to General Plan land use designations or zoning districts, would not result in annexation of land, and would not allow development in areas that are not already planned for development in the General Plan and Zoning Ordinance.

Based on existing and projected population and associated traffic volume levels along roadways in Placer County, it has been determined that the potential impacts caused by the proposed project will require a detailed analysis in the environmental impact report. As such, the lead agency will examine each environmental issue in the environmental impact report and will decide whether the proposed project has the potential to have a significant impact relative to each topic. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the environmental impact report.

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